THE IMPACT OF INDIVIDUAL AND CONTEXTUAL FACTORS ON L2 WRITING DEVELOPMENT: THE SHIFTS IN WRITTEN CORRECTIVE FEEDBACK DURING COVID-19

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ABSTRACT

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The novel COVID-19 pandemic has caused a rupture in the trajectory of education worldwide. Students, families, and schools are experiencing unprecedented times and are navigating uncharted territory together in how we educate our students. In the U.S., it has been noted that the schism within education as a result of the pandemic is the biggest threat to national security (Choi, 2020), noting the importance of education within our democracy. This includes the trauma experienced by families due to deaths caused by the pandemic, the disproportionality of communities of color losing a parent (Brundage & Ramos-Callan, 2020), and the impact on English language development within immigrant communities and Multilingual Learners (Kim 2020). Even prior to the COVID-19 pandemic, Multilingual Learners, specifically English Language Learners (ELLs), is one of the fastest growing student populations across the United States (National Center for Educational Statistics, 2017), and yet has some of the lowest graduation rates, such as in New York (NYSED, 2021). This study seeks to build equity and access of effective instruction through the exploration of one of the biggest challenges for ELLs within academic settings, which is writing, as linguistic errors in L2 writing are pervasive (Bitchener & Ferris, 2012). Written Corrective Feedback (WCF) is a ubiquitous classroom practice in second language (L2) writing development that
directly seeks to increase morphosyntactic accuracy (Kang and Han, 2015). This study performed a case study of an English as a New Language (ENL) high school teacher and three Newcomer ELLs within one of the “Big 5” school districts in New York. Guided by Sociocultural Theory from an ecological perspective, data were collected during the Fall 2020 school re-opening during the COVID-19 pandemic. COVID-19 has positioned schools to integrate more digital tools in their interactions with their students, including feedback. ELL student writing samples with their teacher’s WCF, revisions, interviews, retrospective verbal reports, and classroom artifacts were collected to form cases for intra and inter case analysis to identify the individual and contextual factors that mediate L2 learners’ writing development during the pandemic.

Keywords: ELLs, Written Corrective Feedback, L2 writing, COVID19
DEDICATION

This dissertation is dedicated to the village that has helped me arrive to this point within my intellectual journey.

The village includes my mother, Yvonne González, and my father, Zozonte González. Without their love, support and encouragement in pursuit of education from kindergarten through my doctoral program, none of this would have been possible. The sacrifices they have made throughout my life has afforded me an incredible education which I am eternally grateful.

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The village includes all my family and friends, who provided the support through the challenges and successes of my intellectual journey through laughter and words of encouragement.

The village includes all of my teachers, professors, colleagues and mentors that I received every step of the way who encouraged me to achieve excellence, not just for myself, but more importantly, for the benefit of everyone.
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CHAPTER 1
Introduction

Background of the Problem

This study contributes to the building of equity and access to quality instruction afforded to a group of Multilingual Learners (MLLs), specifically how feedback in second language (L2) writing development is rendered within culturally and linguistically diverse urban classrooms. MLLs include all students who speak a language other than English at home, which accounts for about 1 in 5 children in the U.S. (Thompson & Kieffer, 2018). Among MLLs, one subgroup is English Language Learners (ELLs), who are not yet proficient in English, where about 1 in 10 students in the U.S. is classified as an ELL (Thompson & Kieffer, 2008). ELLs are a rapidly growing population in the United States (National Center for Educational Statistics, 2017). Yet, less than half of ELLs have graduated with their cohort in states like New York. In June 2020, 46% of ELLs graduated while the statewide average was 84.8% (NYSED, 2021). This occurred during the height of the pandemic when standardized examinations required for graduation, the Regents examinations, were canceled and students were provided exemptions in order to graduate. This is extremely concerning as this suggests that even with the examination exemptions, more than half of the ELL population statewide may have failed academic coursework preventing them from graduating.

Even more concerning, prior to COVID-19 examination exemptions, the ELL high school graduation rate was 38.9 in June 2019 while the statewide average was 83.4% (NYSED, 2020). Both the June 2019 and June 2020 ELL graduation rates are dangerously low for any subgroup of students. Due to the exponentially increasing
numbers of ELLs in classrooms and the consistent opportunities gap between this group and their native English-speaking classmates, calls for a shift in pedagogical approaches to increase learning outcomes among ELLs have been made (Jensen, 2017). Failure to act will only foster the ELL opportunities gap to expand.

To further exacerbate the issue on the ELL opportunities gap, the novel COVID-19 outbreak has had a profound impact on the way we educate our students. By July 2020, the global COVID-19 pandemic had infected more than 11 million people worldwide, killing more than 525,000, and with more than 6 months into the pandemic, scientists are struggling to learn how lethal the coronavirus is (McNeil Jr., 2020). The United Nations estimated that 138 countries had closed schools nationwide, while several other countries had implemented regional or local closures, affecting the education of 80% of children worldwide (Wim Van Lancker, 2020). Therefore, the educational trajectory of an entire generation has been impacted worldwide, which may have severe implications for our collective future. The implementation of school closures to prevent the spread of the novel coronavirus has shifted education into a new era of teaching and learning worldwide, where the opportunities gap that has already existed became more intensified. This is exemplified within New York State.

On March 17, 2020, New York State Education Department (NYSED) mandated school districts, charter schools, and nonpublic schools to close no later than Wednesday, March 18, 2020, for a period of two weeks for the safety and security of children, faculty and their families during the outbreak (NYSED, 2020a). NYS schools have remained closed through to the end of academic year as per the executive order of Governor Cuomo as infection has continued to spread and cause death. Therefore, in addition to
the traumatic experiences brought by the COVID-19 infection, the shifts in cultural norms as a result of the social distancing guidelines from the Centers for Disease Control and Prevention (CDC), students’ education was impacted by school closures as well as students’ nutrition as schools was where many students also received their meals.

In New York State, as of March 6, 2021 there are 1.6 million+ cases of COVID-19 infection, with 47,767 deaths (“New York Coronavirus Map and Case Count,” 2021, March 6). Trauma and adverse childhood experiences (ACES), such as losing a loved one to the virus or the lack of access to nutrition, have been linked to disrupted neurodevelopment; social, emotional and cognitive impairment; adoption of health-risks behaviors, disease, disability, social problems and early death in adulthood (Herron, 2016). It has been cited that it has been already difficult for most schools to provide adequate services to the growing culturally and linguistically diverse student populations because they lack teachers and personnel specially trained in these areas (Hart Barnet, 2009). Not only is this still true today, schools turn to educators without the appropriate license to fill the shortage (Alberson-Grove, 2020). These extenuating circumstances of ACES as a result of the COVID-19 pandemic compounds the problem with the pre-existing issues of equity and access for English Language Learners. This further elevates the need for research in support for this population of learners.

This study examined how instruction can be rendered for second language (L2) writing development during the Fall 2020 reopening of schools. The school district of this study provided two instructional contexts based on CDC guidelines that informed the district’s reopening plan during the COVID-19 pandemic: complete remote learning where students remained at home, and hybrid learning where students received a
percentage of instruction on-site in the school building and a percentage of instruction via remote learning. The options were to mitigate the spread of the coronavirus by keeping the number of students within a classroom low, while also ensuring students were six feet apart within classrooms for social distancing. As part of the re-entry plan students and teachers also had to wear a face mask at all times and were provided with hand sanitizers. The school district remained closed for the month of September 2020, in order to continue to prepare for the opening of schools to students. Teachers reported to the school building to instruct remotely within their classrooms. The option for hybrid instruction began in October 2020 and continued through this study’s data collection timeline ending in December 23, 2020. Students began to report on site for classes while many others remained completely remote.

**Statement of the Problem**

Compare to the other language modalities of speaking, listening, and reading, writing in a second or new language setting seems to be the most difficult language skill to acquire in academic contexts (Negari, 2011). This may be because in L2 student writing, linguistic errors are pervasive (Bitchener & Ferris, 2012), especially when compared to their monolingual counterparts. Through a review of the results on the annual New York State English as a Second Language Achievement Test (NYSESLAT), writing tends to be the modality where ELLs struggle the most when compared to the other modalities, including speaking, listening, and reading (district level data analysis). For example, with the majority of Long-Term ELLs, those with more than six years of receiving mandated services and have not yet placed out of the NYSESLAT, the scores for the modality in writing is what holds these students back from achieving a
“Commanding” overall proficiency. This is because writing is a multifaceted endeavor, requiring multiple cognitive processes to occur in tandem, such as planning, scripting, building cohesion and coherence, create meaning while ensuring morphosyntactic accuracy, and revising. For ELLs, the additional cognitive burden to translate their ideas or think in a second language while engaging in the aforementioned cognitive processes will lead to competition in cognitive resources, which often result in writing errors.

In addition, as a result of COVID-19 school closures, state education departments, school districts, teachers and their students are navigating uncharted territory together in providing opportunities for continuity of learning. Decisions on continuity of learning, including instructional decisions, methods, tools, curriculum, and resources utilized, are a local decision (NYSED, 2020b), leaving schools and districts to largely figure out how to meet the needs of ELLs on their own. State education departments, such as NYSED, has released guidance to provide flexibility to federal and state laws to allow the provisions of services to ELLs and procedures as well as the time limit for identifying potential ELL students; however, the expectations remain that school districts must continue to support students’ continuity of learning and the diverse needs of ELLs/MLLs (NYSED, 2020c). As a result, NYS schools have engaged in remote and hybrid learning which provides an opportunity for student and teachers to remain connected and engaged with the content while working from their homes for the safety and security of their health (Ray, 2020).

Although the rapid shift to remote learning presented opportunities for continuity of learning, the challenges in its implementation during the 3 months of school closures have negatively impacted all students, especially vulnerable student populations such as ELLs. In fact, Admiral William McRaven, former US Navy SEAL commander and head
of the US Special Operations Command who oversaw the bin Laden raid says America’s biggest national security issue is currently the K-12 education system during the COVID-19 crisis (Choi, 2020). The use of multiple applications and Learning Management Systems (LMS), have positioned teachers, students and families to test their technological understanding and digital literacy. For others, some have little to no access to technology, having to utilize smartphones or await to receive computers from their respective schools. Even if students received computers, access to WIFI presents yet another challenge within the digital divide.

In addition to issues of access to technology, WIFI at home to participate in online instruction, and teacher training to facilitate synchronous and asynchronous instruction, the parents of millions of American schoolchildren are not fluent in English, presenting yet an extra challenge to learning at home (Rani, 2020). With the rapid shift to remote learning caused by the COVID-19 crisis, school districts are planning for continuity of instruction as they engage in it. With the flexibility in state and federal regulations as it relates to ELL mandated services due to the COVID-19 crisis, it is recorded to have left the nation’s roughly 5 million ELLs with severely reduced language instruction and supports as districts balance their competing priorities and struggle to connect with students attending school from their homes (Robles & Belsha, 2020). These issues around equity and access during these difficult times involve multiple individual and contextual factors. This study aims to build equity through effective feedback instructional practices within culturally and linguistically diverse student populations.
**Significance of the Study**

There are individual, group and societal implications from this study. There is an opportunity to tackle the aforementioned concerns around equity and access through effective feedback within instructional practices for Multilingual Learners through remote and hybrid learning. Now more than ever, equity is paramount within these circumstances. At the individual level, this study seeks to build equity for K-12 ELL students through the documenting and analysis of effective individualized and differentiated feedback practices. At the group level, this study aspires to close the opportunities gap for English Language Learners as a whole by providing a more developed and coherent understanding of systematic and effective feedback for L2 writing development. Lastly, the societal implication is in the promotion of a culture for biliteracy development for all students, especially our English Language Learners.

The research also has importance at the local, state and world levels. At the local level, this study informs ESOL teacher practices in providing intentional and quality feedback for L2 writing development in order to close the opportunity gap. At the state level, it will inform policies and guidance to the state educational department on practices for hybrid and remote L2 writing development. For example, NYSED created a set of briefings entitled, Advanced Literacies for Culturally and Linguistically Diverse Students, to guide educators to the instructional literacy shifts within the Next Generation Learning Standards (NYSED, 2017). This set of 8 articles from Lesaux and Galloway reviews topics such as reading comprehension, engaging texts, talk and discussion to building academic languages, and writing to build language and knowledge; however, not once in any of the 8 articles does it mention the provision of feedback to students. At the
global level, we live in an ever globalizing and interconnected world, where communication in both speaking and writing with accuracy is crucial. The development of biliteracy, or literacy in multiple language is no longer the exception, but rather, it has become a requirement. We see this in the U.S. with the Seal of Biliteracy initiative. Globally we see this with English as it is the lingua franca in many countries in both business and social interactions.

Lastly, this study has implications for the field of study within L2 writing development. Written Corrective Feedback (WCF) is a common instructional strategy and is the subject to increasing attention in recent years due to the conceptual controversy surrounding it within the research literature and because of its ubiquitous practice in classrooms (Kang & Han, 2015). WCF helps second language (L2) learners improve their writing effectiveness; however, it remains a divisive issue among researchers (Ferris, 2010). In fact, conceptual differences aside, empirical studies have led to inconclusive and conflicting findings; nevertheless, the extensive research has yielded that WCF does lead to improved morphosyntactic accuracy within L2 writing development (Kang & Han, 2015). It is in the how, when, what and to whom with WCF that remain to be empirical questions.

WCF is as diverse as there are scaffolds to support learning. It should be considered strategically to ensure the most effective and efficient learning experiences for ELLs. Even more so, an understanding of the individual and contextual factors that impact the effectiveness of WCF in L2 writing development has been understudied (Storch, 2018). The majority of WCF studies thus far have been in post-secondary settings (Lui & Bown, 2015), within experimental and quazi-experimental designs,
predominantly utilizing cognitivist theoretical frameworks, and focused extensively on
the linguistic structures (Han, 2019). This study addresses the gap in the literature for
studies within K-12 classrooms, using constructivist theoretical frameworks, and taking
into a holistic account through the analysis of individual and contextual factors that
contribute to L2 writing development.

Especially now, an understanding in how teachers are employing WCF during
remote and hybrid learning as a result of the COVID-19 crisis is critical. This study
builds on the understanding of the instructional practices, relationships, and other
individual and contextual factors that provide meaningful and effective WCF during
remote and hybrid classroom settings. This holistic study informs the development of a
coherent understanding of the ecological affordances that are currently being provided to
ELLs during the pandemic in order to identify the key factors that contribute to L2
writing development. Many researchers and school districts are currently engaged in the
collection of pedagogical practices via distance learning that has had positive student
outcomes (Benedict, 2020), this study did the same but with a focus on L2 writing
development.

**Purpose of the Study**

The primary purpose of the study was to investigate the interactions between the
individual and contextual factors that shape English as a New Language (ENL- formerly
ESL) teachers' Written Corrective Feedback (WCF) practices and high school ELLs’
responses to the WCF provided within one of the "Big 5" urban school districts in New
York during the COVID-19 pandemic in the Fall 2020 semester. The study utilized
Vygotsky’s (1978) Sociocultural Theory’s key constructs of the Zone of Proximal
Development (ZDP), scaffolding, and mediating tools as it relates to ENL teachers’ WCF practices on ELL L2 writing development. This study took a qualitative approach through a case study design to understand the ecology of the WCF provided to ELLs on their writing during a time of crisis and the dynamic relationship between ELL individual factors and the contextual factors that shape the individual variations in ELL students' response to their teacher's WCF. The COVID-19 outbreak has positioned K-12 educators and students to navigate together uncharted waters and has had a profound impact on the way educators and students interact. Therefore, the investigation of how these changes have impacted the tools and scaffolds of WCF using an ecological perspective will provide an understanding of the complexity of ELL student L2 writing development during these unprecedented times to inform praxis.

**Positionality**

In this study, it is important to acknowledge the role that positionality and the research in the contexts of the United States played in this study. Based on Parsons’ (2008) call for science education research approaches that explicitly considers the positionality of African Americans in the United States, positionality refers to the concept that acknowledges the complex and relational roles of race, class, gender, and other social constructed identifiers in being. In her article, Parsons (2008) discusses the need for a positionality that involves the negotiation of three district and conflicting realms of experience that pertain to oppression, African-rooted Black Culture, and the dominant culture in the United States. The author then superimposes the positionality of African Americans upon a model that synthesizes the ideas of cultural-historical activity theory (Cole, 1998) and the ecology of human development (Bronfenbrenner, 1979). With the
theoretical orientations and use of African-American positionality, Carlton Parsons (2008) seeks to counteract the prevalence of the research field that often-utilized terms such as “deficit” and “difference” in the critique of research involving African Americans. The literature, especially in Science education, portrays a deficit perspective that begins with an implicit premise that the cultural, social, educational, political, and economic spheres of life in the United States and access within the aforementioned are the same for all Americans regardless of race, ethnicity, gender, social class, and so forth. Thus, it is important that positionality is considered within research to understand the underlying mindsets and lenses the researchers brings with himself/herself that often lies implicit in our data collection, analysis, and interpretation. Also, Bronfenbrenner’s (1979) ecology of human development model is also utilized within the ecological perspective within Sociocultural Theory, which guided the theoretical framework utilized in this study.

As a researcher, my multilingual and Hispanic/Latino-American identities shaped the positionality I took throughout each step of the study. From the onset, this study sought to build equity and access to Multilingual Learners, the majority of whom are Hispanic/Latino and whom I can provide a voice for as I consider myself a Multilingual Learner, teacher of Multilingual Learners, and administrator for multilingual learner programs.

My identity as a multilingual person. Languages have always enamored me. Perhaps it is due to being raised within a multilingual household, or by its complexity in use and learning. Perhaps it is how languages reflect one’s identity and the dynamic relationships and tensions between those who are deemed as members of a language
group. Nevertheless, my understanding of how languages are learned and used has been informed by my experiences. At home I was exposed to English and Spanish, more specifically I grew up being surrounded by music, television, books, traditions and customs from English (mostly American) and Spanish, including language and culture from Puerto Rico and the Dominican Republic. I became sensitive to the nuances of languages in what is said and how it is said. Often times, there is tension in meaning and in communication not only across languages but also within language. Spanish words, expressions and accents that were common with my Dominican family and friends stood out and was perceived as different by my Puerto Rican family and friends and vice versa.

With English, I noticed how language changed by audience and topic. The English registers I heard in school, on the news, and read in books emphasized different topics, lexicon and morphosyntactic structures. Therefore, from the onset, my understanding of the learning and use of language in both oral and written discourse is that it is a multifaceted endeavor. It requires the consideration of individual and contextual factors, and the ecology of the user, in order for the language user to convey the intended meaning within our communication. Although I am a multilingual learner, I am not nor was I ever an English Language Learner, as English is my dominant language.

For me personally, writing is the most difficult skill of the four modalities, in both English and Spanish. From my experience, it requires much time and focus. Even with multiple revisions and editing processes I engage in, hidden errors or inaccuracies linger within my writing. Writing for me, due to my profession and academic studies, is an everyday occurrence. I write paragraphs upon paragraphs each and every day just for work alone, including emails, memorandums, guidance documents, reports, etc. For my
graduate studies, writing research papers and other written responses positions me to continue writing outside my working hours into the evenings and weekends. When I am not writing for work or school, I am writing on social media providing updates on what I am thinking or doing at a particular moment. Writing is directly tied to my livelihood, socio-economic advancement, and social interactions. As I grew, so did my writing and the types of assistance I required and level of difficulty I was able to engage in. The guidance and interactions of those with deeper understanding had afforded me with opportunities to refine and enhance my writing ability in both English and Spanish. This is why I find writing to be so critical.

**My identity as an administrator.** My experiences fostered a passion for languages, language teaching and learning, and literacy. I am currently within my tenure year candidacy (fourth year) serving as the Director of Language Acquisition for one of the “Big 5” urban school districts in New York. In my role, I provide instructional and technical support for a district of 39 K-12 schools and one adult learning program as it relates to language learning and teaching. As the Director of the Language Acquisition Department, I oversee the Bilingual Education programs (Dual Language and Transitional Bilingual Education), English as a New Language programs (formerly ESL), and World Language programs including Spanish and Italian. I monitor the Title III compliance to ensure that the mandated services and units of study are being rendered at each school for our Multilingual Learners.

The majority of my role is in the provisions of professional learning opportunities to the department’s teachers as well as to other content specific teachers (i.e. Social Studies, Science, ELA, Math, etc.) and school building level administrators to support
our Multilingual Learners and English Language Learners in addressing their conceptual, analytical and linguistic development. I often visit classrooms where I provide teachers with feedback on their instruction. I am also involved in principal and teacher evaluations as part of the annual performance review. One major learning from my experiences in classroom observations and professional learning is that feedback is critical to sustain, motivate, grow, refine and disrupt practices. An observation I have made from visiting classrooms is that extended writing instructional activities are often few and far in-between, rendering feedback opportunities on writing to be just as scarce.

The New York State Seal of Biliteracy (NYSSB) is a formal acknowledgement of students’ proficiency and academic excellence in English and one or more World Languages. Within my role as a district leader, I implemented the NYSSB initiative. Prior to my start, the district graduated zero students with the NYSSB. In my first year of implementing the program (2018), we had 50% participation of the secondary schools with 37 graduates across four languages. Most recently in June 2020, we had 100% participation of the secondary schools with 145 graduates across 13 languages. This initiative is open to all students and it best represents my goal in fostering multilingualism and multiliteracy. It also merges the various contents areas I oversee, including Bilingual Education, ENL, World Languages, and English Language Arts.

My experiences as a district administrator has provided me with a bird’s eye view of an educational system, and the intricacies and components that produce the current status quo. In contrast to my experiences as a multilingual person in the previous section, this perspective has positioned me to see the big picture on how language development is institutionalized within an educational system. However, one consistent noticing is that
there is much variation in the contextual and individual factors within schools, students and educators that requires consideration when rendering strategic and quality support. For this reason, my role has positioned me to continuously seek learning opportunities in order to stay abreast to the cutting-edge research and methods on language and literacy development within culturally and linguistically diverse populations in order to better support our students, teachers and schools.

**My identity as a teacher.** Prior to my role as a district administrator, I taught within New York City Public Schools as a Spanish teacher and English as a New Language (ENL) teacher. I am certified in both as I was interested in the teaching and learning of both English and Spanish as new languages and found the teacher preparation coursework to be complimentary to both contexts. I taught for 5 years courses such as Spanish Introductory courses (i.e. Spanish 1, 2 & 3), Spanish Heritage/Native Language Arts, College Board Advanced Placement for Spanish Language and Cultures, and SUNY Albany Spanish Courses for High School students. For English as a New Language, I taught ENL Standalone courses for recent immigrants with little to no English from a variety of home languages including Spanish, Arabic, Urdu, and Malayalam. I also provided ENL integrated services for English Language Learners (ELLs) within content areas. During my time as a teacher, I often was provided teacher leadership opportunities to lead professional development for my peers in supporting the ELLs in their respective classrooms. I provided coaching and support by providing teachers with feedback. Ultimately this positioned me to pursue my administrative degree to effect change on bigger populations of students.
Prior to my teaching in the NYCDOE, I taught English as a Foreign Language (EFL) in a high school in Madrid, Spain for one year. I obtained this job in order to financially support myself after receiving my Master of Arts degree in Spanish Literature where I lived and studied in Spain the year prior. I took the job with no interest in a career in education. I never saw myself as a teacher or educator during my elementary, secondary, college or even graduate years. I started the job thinking it would be easy enough in order to receive a paycheck while living aboard. However, during that year I quickly learned how difficult teaching a second or new language is in specific, and how difficult teaching in general is. Between the lesson planning, delivering instruction and classroom management, teaching was not as easy as I though. However, when I experienced the progress my students made from the beginning of the year towards the end of academic year in their reading, writing, speaking and listening in English, I found a sense of pride and passion in second language teaching and learning. This is why I say that I didn’t choose a career in education, it chose me.

During my time teaching EFL, ENL and Spanish, the teaching of writing was the most complex and difficult modality I have experienced. I was amazed and perplexed by the progress, lack of progress and variation in the writing I received in both English and Spanish. From my native-speaking Spanish students who wrote essays in Spanish phonetically, to ELL students who had to learn a different directionality when writing, to students who were able to articulate their ideas verbally but struggle to draft it on paper, I had to plan and differentiate in order to meet the individual needs of each student during the pre-write, drafting, and editing/revision stages in the writing process. Some students needed graphic organizers to plan and guide their writing, others needed peer or teacher
interaction while they wrote, and others desired complete autonomy while they wrote. The goal was to assist students to ultimately become autonomous writers as many of the standardized examinations required timed essay writing. I have learned that achieving autonomy, especially in writing, required different levels of assistance depending on who the student is. This assistance was also dynamic as the student, as their needs changed through time even within the academic year.

**My trajectory and passion for this work.** As captured in my identities as a multilingual person, a K-12 educational administrator for language acquisition, language teacher, and experience, one consistent factor is my passion for languages, the teaching and learning of languages, and my goal to increase the capacity of students, teachers and schools for multiple language learning. My pursuit of this study in specific and the doctoral degree in general is to increase my own capacity as a scholar practitioner in order to lead school districts through the teaching and learning of languages and literacies within culturally and linguistically diverse communities. I seek to develop relationships with leaders in the field of language and literacy development, be acknowledged as an expert in the field of second language and literacy development, and eventually transition into academia within teacher and educational leadership preparation programs to prepare the next generation of educators and educational leaders.

**Exploring bias.** As mentioned in the expression of my identities above, there are experiences that align and depart from my multiple identities. For example, my identities as a teacher and an administrator overlap as it relates to serving Multilingual Learners; however, the identities depart as it relates to supervision and perspective (i.e. classroom level perspective versus district level perspective). As a result, there are “blind spots” or
assumptions that may inhibit me from fully understanding or engaging with my research population. One assumption I came in with and was confirmed in this study is the ability for teachers to articulate, versus describe, the various types of WCF or feedback they use. They were able to describe their WCF practices, discussed why, but were unable to provide the theoretical motivations or the explanations made in the extent literature, nor did I expect them to. When I was a classroom teacher, I too was unable to do this myself until taking advanced graduate course work in applied linguistics and literacy beyond the teacher preparation programs. My assumption was that they will use their experiential knowledge and observations as it relates to WCF, as I did, that are completely valid but may not be as systematic as a designed study, nor should it be.

My assumptions also led me to believe, based on the results of the literature, that WCF does promote morphosyntactic accuracy in L2 writing, if given the appropriate WCF type and instruction. This may have deterred me from exploring and examining more in depth the times that WCF was ineffective. However, this study investigated the ELL students’ responses to the WCF feedback provided, be it effective or ineffective, in order to determine the alignments and misalignments between the individual and contextual factors with the WCF rendered.

Also, as a district director, I acknowledged the power dynamic that comes with my position that may have affected the data collection, analysis and interpretation. For example, the participating teacher and students may have behaved in manners that they think I may have wanted to see and hear instead of being their authentic selves during classroom observations and interviews. In fact, one student participant wrote multiple drafts in order to impress me, as reported by the teacher. In addition, the teacher
participant may have adjusted her feedback practices as she knew I would be collecting and analyzing it.

**Research Question**

What is the impact of new mediating tools on the provision of and response to WCF during the COVID-19 school re-entry during the Fall 2020 semester within high school ENL courses?

**Definition of Terms**

*Multilingual Learners and English Language Learners*

Multilingual Learners (MLLs) is a term that has been increasingly gaining traction in the literature and in state education guiding documents. In NYC Department of Education, the Division of English Language Learners (DELLS) transitioned into the Division of Multilingual Learners (DML). NYSED has also utilized titles that juxtaposed Multilingual Learners and English Language Learners (ex: Multilingual Learners/English Language Learners). The term Multilingual Learner also represents a shift from a deficit classification to one based on assets. Before MLLs and ELLs, students were classified as Limited English Proficient (LEP), giving a negative connotation that students learning English were limited. The shift from ELL to MLL also de-emphasizes the shift from English centric notions for these learners, to one that acknowledges the benefits of knowing multiple languages.

However, state departments, such as NYSED, still refer to students as ELLs as it relates to a protected group that is eligible for additional services, supports and funding. As mentioned earlier in this introduction, there is a difference between MLLs and ELLs. All ELLs are MLLs, but not all MLLs are ELLs. ELLs are a subgroup of MLLs as MLLs
are 1 in 5 children in the U.S., while ELLs are 1 in 10 students. (Thompson & Kieffer, 2018). For these reasons, this study will maintain the term, English Language Learner or ELL in order to target the intended population of the protected class that receives mandated services, supports and funding under the Federal Every Students Succeeds Act (ESSA) and the NYS Chancellor’s Regulations-Part 154 mandates on identification and services for ELLs.

**Sociocultural Theory**

Sociocultural Theory (SCT) guided this study in its investigation of second language learning and teaching in general and L2 writing development and WCF in specific. Originally conceived by Vygotsky (1978, 1981) during the years immediately following the Russian Revolution, this theory views human cognitive development as occurring in mediated social interaction. Instead of conceptualizing learning as a process that takes place entirely in the person’s brain, the mediation between the learner and his/her environment and the interactions between them are also part of the learning process in addition to what occurs within the brain. Sociocultural theorists claim that learners are individuals and we bring multiple factors to mediate cognitive processing, such as beliefs and attitudes (Guo, 2018). This aligns with the overall design of this study. Both I, the researcher, and the participants bring with us our beliefs, attitudes, aspirations and experiences to our cognitive processing and social interactions with each other. The descriptions of the key tenets of SCT below will paint the picture of what the theory entails and how it shaped this study.

**Mediated minds.** According to Lantolf (2000), the most fundamental concept of SCT is that the human mind is mediated. Vygotsky (1978, 1981) argued that we as
humans do not act directly on the physical world, but rather, rely on the use of tools and labor activity, which allows us to change the world and the circumstances under which we live in the world. Initially, the learner carries out activities or tasks under the guidance of others, or “other regulation,” where the learner is inducted into a shared understanding of how to do things through collaboration (Guo, 2018). Through internalization, the learner will be able to engage in the same activities or tasks with less “other-regulation” and eventually make the new knowledge or skills part of their own consciousness and eventually become “self-regulated” (Lantoff, 2000). As a result, SCT views the direction of development from the social to the individual (Bitcher & Storch, 2016). In other words, from a SCT perspective, cognitive functions appear first in social interactions between humans and then subsequently become internalized within the individual. This key premise represents a departure from other theories of cognitive development that mostly emphasized learning as an individual process (e.g. Piaget, 1977).

Learning requires socialization and interaction between the learner and the expert, where knowledge is co-constructed and then internalized by the learner. Thus, this study investigated how we as participants (researcher, teacher and students) are inducted into a shared understanding of how to develop L2 proficiency within a classroom and how the interactions between student, teacher and researcher provided opportunities for development. More importantly, the study used a SCT perspective in order to change the world and the circumstances under which we live by increasing the equity and access to opportunities for L2 development for ELL students through socialization, interaction and collaboration, specifically through effective feedback practices. The goal is to provide
opportunities to ELLs to transition from other-regulatory to self-regulatory experiences, the process where ELL students internalize and make new knowledge or skills part of their own in becoming autonomous learners.

**Mediating tools.** As mentioned above within “Mediated minds,” mediating tools is Vygotsky’s fundamental claim that human cognitive development is mediate by culturally constructed means or tools (Storch, 2018). The tools can be physical or concrete such as an abacus or computer, to assist learners in their cognitive development. Symbolic tools, or signs, can also be used to mediate and regulate our relationships with others and with ourselves (Lantoff, 2000), such as language and gestures. For example, language, a symbolic tool, can enable interaction between the expert and the novice. Physical and symbolic tools are artifacts created by human cultures over time and are made available to succeeding generations, which can modify these artifacts before passing them on to the next generation (Lantoff, 2000). Therefore, tools can be utilized to facilitate and shape actions, including the regulation of our thinking processes and these tools evolve over time and new tools are created that impact human action and ultimately on cognitive development. In the example of WCF and remote learning, tools such as track changes, marginal comments, textual enhancements, and other software programs that automate feedback, we see an effect on the quantity and the nature of the feedback the teacher provided and also on how learners engage, process and appropriate the feedback. Therefore, every facet of this study is mediated through tools (both physical and metaphoric tools) to allow me, the researcher, to socially interact and observe the interaction of the world around me.
Zone of Proximal Development (ZPD). From an SCT perspective, cognitive development takes place not just in the brain, but in social interaction, where the more knowledgeable member (parent, teacher, or more knowledgeable peer) provides appropriate forms of assistance to a learner (Storch, 2018). According to Vygotsky (1978, 1981), all learning appears twice in the life of the individual, first on the intermental plane in which the process occurs between the learner and the other person and/or cultural artifacts, and later on the intramental plane in which the capacity is completed by the individual through processes within themselves through internalization (Lantolf, 2000). In other words, the ZPD is the difference between what a person can achieve when acting alone (self-regulated) and what the same person can accomplish when acting with support or assistance from some else and/or cultural artifacts (other-regulatory). For development to occur, the assistance provided requires to take into consideration the learner’s current and potential level of competence which exists within the metaphor of the ZPD. Diagram 1 reflects the metaphor of the ZPD, including the actual developmental level, the potential developmental level, and the difference between the two levels known as the Zone of Proximal Development.

Storch (2018) identifies two key traits of effective assistance, graduate and contingent. Graduated assistance is based on the assumption that too much assistance may be detrimental and can discourage the learner to become independent, whereas too little assistance could cause the learner to shut down their learning process. How can we determine what is too little or too much for a learner? How do we know the student’s actual and potential levels within their ZPD? This is based on the second trait of assistance, contingency. Contingent assistance implies that support, such as feedback,
needs to be responsive to the learner’s performance with the goal of ultimately removing it when the learner displays the ability to function autonomously. Therefore, the collection of multiple sets of data allowed for the investigation of determining the students’ performance and the resulting assistance being provided by the teacher that addressed the students’ movement from other-regulatory to self-regulatory within their individualized ZPD. How can teachers systematically provide assistance that is both gradual and contingent? This is embodied in the tenet of scaffolding.

**Scaffolding.** The metaphor of scaffolding is a key tenet in SCT which reflects the process of supporting learners by directing their attention to the key feature of the tasks or activity, which prompts the learner through successive steps of a problem (Guo, 2018). Scaffolding provided through the interaction between the learner and the more knowledgeable other or cultural artifact can lead the learner through their ZPD from their actual level to their potential through the transition of other-regulatory assistance to self-
regulatory assistance. From a SCT perspective, errors are understood to be reflections of the learner grappling for self-regulation when the task is demanding (Guo, 2018). When appropriate other-regulation (scaffolding within the ZPD) is provided, to assist the learner in accomplishing the task, the learner will be able to accomplish the task with less dependency on other-regulation in the future, which means learning has occurred (Storch, 2018). In short, learning does not necessary mean that the students writing is absent of errors. Rather, learning from a SCT perspective accounts for the changes in the type of scaffolding required. Specifically, the change of scaffolding that shifts from other-regulatory to self-regulatory is indicative of learning. An example of this shift with regards to feedback is the gradual shift in assistance from providing explicit feedback (other-regulatory) to implicit feedback (self-regulatory), which serves as evidence of language development. Figure 1.2 shows the movement of scaffolding through the ZPD through the gradual transition of other-regulatory to self-regulatory.

In figure 1.2, the white star reflects that internationalization has been accomplished and that the learner has reached their potential developmental level for that particular activity or task through autonomous thinking. The black star reflects what the student can do by themselves within their actual developmental level. The gray arrow reflects the scaffolding provided by the teacher, parent, more knowledgeable peer or cultural artifact that gradually transitions to providing more autonomy to the learner, which lies within the learner’s ZPD.
ZPD Scaffolding from other regulatory to self-regulatory

As portrayed in figure 1.2, scaffolding reflects a spectrum of practices and is contingent. This implies that scaffolding represents what the learner can do independently in the future and what can be accomplish today with assistance. Therefore, scaffolding is future orientated with the goal to gradually reduce the fortitude of the assistance, and provide opportunities to the learner to become independent.

Scaffolding as both gradual and contingent compliments the Gradual Release of Responsibility Model (Pearson & Gallagher, 1983). This model envisions instruction to move from explicit modeling and instruction to guided practice and then to activities that incrementally position students into becoming independent learners. Written Corrective Feedback is an example of scaffolds, contingent on what the learners produces in their written work, gradual in the type that is rendered based on the needs to improve their
written work, and reflects a range of types and explicitness with the goal for learners to self-corrective with little to no prompting from the teacher.

**The Ecological Perspective on Language Development**

The ecological perspective stems from Vygotsky’s (1978, 1981) Sociocultural Theory and includes the ecological-semiotic frameworks based on Bronfenbrenner’s (1979) bioecological model and Gibson’s (1979) notion of affordance referring to the reciprocal relationship between an organism and a particular feature of its environment. Just like SCT, the ecological perspective questions the common assumption that language, conditions, memories, and intelligence are uniquely contained inside the brain (van Lier, 2000). Instead, from an ecological perspective, the learner is immersed in an environment full of potential meanings and these meanings become available gradually as the learner acts and interacts within and with the environment. Thus, to search for learning we must look to the active learners within their environments, and not just the contents in their brains (van Lier, 2002).

This amplified understanding of learning demonstrates a rupture in the trajectory in the research of Second Language Acquisition from a technological understanding to an ecological one. In her article Larsen-Freeman (2016), the author discusses the shifting metaphors from cognitive terminology that has dominated much of the research, such as input and output, to the burgeoning constructivist notions of language learning, such as affordances and adaptation. The shifting of metaphors also reflects the shift of the paradigm within the second language learning development research from being primarily concerned with just the individualistic processes to a research agenda of
learning that is inclusive of the individual and their surroundings. This is captured in the bioecological model.

**Bioecological model.** Bronfenbrenner’s (1979, 1993) bioecological model displays a model of hierarchically nested ecosystems that reflect the contextual factors that affect learners’ development. Figure 1.3 below reflects how the individual is situated within their context or ecosystem, and how learning is contextualized. Learning contexts in Bronfenbrenner’s model are described as proximal processes, analogous to the Sociocultural theoretical construction of the ZPD (van Lier, 2000). With the SCT understanding that the direction of learning from the social to the individual within the ZPD, to study learning requires researchers to study the learners within their environment and learning context. This is inclusive of the investigation of the individual and contextual factors that shape the learner’s experiences and that afford opportunities for learning.

**Figure 1.3**

*Bronfenbrenner’s (1979, 1993) Bioecological Model*
In the Bioecological model depicted in figure 1.3 above, the individual is nested within a set of sub-systems, including the most immediate settings to the macrolevel social and cultural contexts. This suggests that even learners who are in the same classroom may still perceive instruction differently, engage in different activities, be exposed to different learning resources outside the classroom, and achieve different outcomes based on what their environment has afforded to them. The affordance construct is key in the ecological perspective of language learning and “recognizes that language learning is not an isolated activity within the implicit causality of input and output but of a dynamic process that mandates that learners be an active participant in the language learning environment” (Thomas, 2014:727; as cited in Larsen Freeman, 2016). The construct of affordance is further discussed below.

**Affordance.** From an ecological perspective, an affordance is a particular property of the environment that, for good or for ill, is perceived by an active organism in that environment (Gibson, 1979). What becomes an affordance within the environment depends on what the organism does, what the organism wants, and what it is useful for the organism. Van Lier (2000) provides an illustrative metaphor for affordance, where a leaf within a forest can offer different affordances to different organisms. It can serve as food for caterpillars, shade for spiders, cutting for ants, medicines for shamans, etc. In each case, the leaf is the same and the properties do not change. However, it is in how the organisms within the ecosystem perceive and act upon the different properties of the leaf. In the context of language learners, if the learner is active and engaged, the learner will perceive the language and literacy opportunities afforded by their environment and actively use them based on how useful learners perceive it to be. For this reason, learning
is captured in emergence, rather than a cause and effect relationship. It is up to the learner’s environment, including the teacher, to create and provide opportunities for equity and access through the provisions of affordances to ELL students. This includes not only the resources and materials for language development, but also, the guidance and relationship building between the learners and affordances made available in order for learners to perceive and act upon these supports in their language development, such as engagement. Affordances, therefore, have two aspects which is further defined below.

**First order and second order affordances.** As captured in the leaf metaphor, affordances appear to take two forms, a property-centered form and a relational form. In the literature, this is distinguished by first order affordance and second order affordance (Larsen-freeman; Cameron, 2015). First order affordances are the opportunities for engagement in rich contexts of use, differentiated instruction and technology, all of which involve the manipulation of properties in the environment. Examples are the texts a teacher selects for students to read and analyze, the scaffolds teachers utilize for scaffolding the reading of the text (i.e. graphic organizers), and the WCF rendered on student writing for revision.

In contrast, the second order affordances depend not on the physical properties in the environment, but rather on the relationship between the properties and a perceptive, active agent (Larsen-Freeman, 2016). Thus, learners are not passive recipients of data; but rather, they are active agents in the process such that the learner establishes relationships and engages with the learning opportunities that arise with and within the environment, directly perceiving and activating on the ambient language around him/her (Anderson 2015: 228 as cited in Larsen Freeman, 2016). In order to engage learners,
affordances but be authentic to them and be perceived as something that learners can
learn from and that are important to their learning. Therefore, the distinction between
first order and second order affordances is the shift from property-centered views to a
relational one. It is crucial then to include the learner’s perceptions and actions in
research in order to achieve a holistic understanding.

In summary, the affordances are dynamic, adaptive and contingent. The
operationalization of these terms is similar to the SCT construct of scaffolding; however,
affordances consider not only the properties of the environments (first order affordances);
but also, the learner’s relational stance towards the environmental properties that creates
an affordance (second order affordance). The implications for the role of the teacher in
providing affordances to language learners is that the agency still rests with the learners;
however, the teacher is to manage the properties of the environment as well as managing
the relationships between the students and the environment by guiding students to
perceive and act upon the ambient language affordances in the environment. Thus, one
should not just consider “what is effective,” but also, what is appropriate for these
learners under the contextual and individual circumstances. A consideration of the
individual and context factors is critical to the language development process.

**Sociocultural Theory and the Ecological Perspective on the Study of WCF**

Sociocultural Theory from an ecological perspective guided the investigation of
this study because it reflects my positionality that learning is social, knowledge is co-
constructed, and learning is based on the experiences and relationship between the
learner, those around them and their environment. Learning is socially and culturally
situated, that occurs between the learner and the interlocutor, and then internalized by the
learner. My experiences and identities situated me to co-construct my understanding of L2 writing development as it relates to Written Corrective Feedback with the participants (teacher and students) through the analysis of their individual and contextual factors, and includes my own. It also allowed me to observe the student’s performance in determining their actual and potential developmental levels, the affordances rendered by teacher in response to the students’ performance in the form of scaffold types and assistance, and where it lies within the learners’ ZPD based on the learners' response to the assistance (i.e. WCF).

From SCT stems the ecological approach that considers the relationship between the learner and the environment, embraces the richness and complexity of the context, and rejects the simplistic cause-effect relationship in language development. The ecological perspective shifts the emphasis from the scientific reductionism to the notion of emergence. Meaning that the phenomenon within the study should not be explained in terms of simpler phenomena or components; but rather, at every level of development, properties emerge that cannot be reduced to those of prior levels (van Lier, 2000). Is also claims that not all of cognition and learning can be explained in terms of processes that go on inside the head. It also asserts that perceptual and social activity of the learner (verbal and nonverbal interactions), are central to understanding of learning. In other words, both verbal and nonverbal interactions do not just facilitate learning, they are learning in a fundamental way.

In addition, SCT and the ecological perspective has been on the cuff of the research in WCF (Storch, 2018; Han, 2019), they are relatively recent theoretical frameworks in applied linguistics research (Bitchner & Storch, 2016), and has virtually
not been done within the K-12 settings. Historically research in Second Language Acquisition, including research on WCF, has mostly utilized cognitive theories such as Skill Acquisition Theory (DeKeyser, 2007) and Information Processing Theory (Anderson 1983, 1985), which is primary concerned with the processes in that occur in the brain, and has largely view learning as the presence of the accurate linguistic form after feedback has been rendered once errors has been noticed. SCT accounts for the additional processes that occur through interactions, with the changes in the types of scaffolds and assistance provided to learners from explicit feedback to more implicit feedback practices. With a SCT and ecological perspective, not only is the presence of corrected errors reflect learning, the interactions and gradual shifts from explicit to implicit scaffolds is also evidence of learning. This comprehensive set of evidence is often lost in other theoretical frameworks. The alternative is an ecological perspective that stems from SCT and Vygotsky’s (1978, 1981) vision of human development, the bioecological model developed by Bronfenbrenner (1979; 1993) and the concept of affordances from Gibson (1979) where the features of these perspectives can serve as a guide for the identification of learning opportunities in classrooms.

**Morphosyntax.** Morphosyntax is a term used by linguists to refer to the internal structure of words and the way in which words are put together to form phrases and sentences. The term reflects the amalgamation of two constructs within linguistics, morphology and syntax. Morphology is the study of words, how they are formed, and their relation to other words. A morpheme is a meaningful morphological unit of a language that cannot be further divided (e.g. *in, come, -ing*, forming *incoming*). Some morphemes can stand alone of are considered “free morphemes” such as “bad.” Whereas
other morphemes are “bounded” such as “-ing” an “-ly.” Syntax refers to a set of rules for the arrangement of words and phrases to create sentences in a language. This study is focused on the WCF rendered to students’ morphosyntactic structures (i.e. grammar), and not to areas such as the conventions of writing (capitalization, punctuation, and spelling).

**Assumptions**

Based on Sociocultural Theory and its construct of the Zone of Proximal Development, I engaged in the study with the assumption that teacher practice would mirror the research of mediated learning, where teachers’ scaffolds for their learners’ linguistic performance with less and less explicit feedback as students become more independent and accurate users of targeted L2 forms and structures. As students increase in their grammatical accuracy in their writing, teachers will begin to utilize more implicit scaffolds. Teachers will also utilize a variety of tools with their students in providing feedback, including paper based as well as digital tools to accommodate distance learning.

**Limitations**

This study incorporates a case study approach, which has often been suggested that it is too particular; however, case studies are valuable since a scientific discipline without a large number of thoroughly executed cases studies is a discipline without systematic production of exemplars, and a discipline without exemplars is an ineffective one (Flyvbjerg, 2006). In addition, the study was completed during the Fall 2020 semester during the months of September through December. During the course of that time, the student participants only engaged in one written task that received WCF in which students engaged in a revision task utilizing the WCF rendered. Perhaps a
yearlong study would capture multiple writing tasks that received WCF to capture the changes, if any, in the WCF types provided to the student participants.

**Delimitations**

Only the work of high school ELLs and their respective ENL teachers will participate in the study. Those ELLs with reported learning disabilities (SWD), ELL students with interrupted formal education (SIFE), and Former ELLs (FELLs) were not included in the study as they may require other writing supports aside from language which may influence the type of WCF employed by their teachers. This can be an opportunity for further research to explore WCF for these ELL subgroups. Newcomer ELLs (0-3 years in the country) who are not also classified as SWD, SIFE or FELLs were included.

**Summary**

This chapter discusses issues related to ELL academic achievement as it relates to L2 writing development during the COVID-19 crisis (school closures and remote learning). In particular, the chapter focused on the plight of L2 learners in their morphosyntactic accuracy within their writing, the attempts of ENL teachers to improve their accuracy by utilizing WCF and the central qualitative research question that will guide the study. The researcher’s positionality and theoretical stance described how the direction of learning moves from the collective to the individual, and that the assistance, scaffolds and tools utilized should be contingent to the learners’ performance and gradually transition from explicit to implicit practices in order to build autonomy in learning. Chapter 2 will present a review of the WCF literature as it relates to improving grammatical accuracy in L2 writing development. Chapter 3 reviews the methodology
informed by the research and the ecological perspective within SCT. Chapter 4 discusses the findings and analysis of the data collected. Lastly, Chapter 5 reviews the implications and next steps for future directions in WCF research.
CHAPTER 2
Review of the Literature

The United States education system is facing a challenge that is moving too quickly for educators to keep up with the demand. School demographics are shifting rapidly creating culturally and linguistically diverse classrooms. Compared to other student groups, English Language Learners (ELLs) are the fastest growing segment of the student population (National Council of Teachers of English, 2008). Schools appear not to be equipped in meeting the instructional needs of ELLs. In New York State, the ELL high school graduation rate in 2020 was 46.0%, an alarming rate for any subgroup of students (NYSED, 2021). The opportunities gap between ELLs and their native English-speaking counterparts is salient (Jensen, 2017). This is particularly true with regards to one aspect of academic literacy, which is writing.

The ability to write well enables one to participate to the fullest extent in the many aspects of society (Cushing Weigle, 2011). We write to learn, to convey emotions, to inform, to convince or persuade, to entertain, delight or please and to keep in touch. The cognitive processes that are engaged when we write include to reproduce, organize or reorganize, and invent or generate something (Cushing Weigle, 2011). Nagode, Pizorn and Jurisevic (2014) even goes further to suggest that the “ultimate purpose of writing in many cultures is literacy” (p. 90). However, writing in a second or new language setting seems to be the most difficult language skill to acquire in academic contexts (Negari, 2011). This is because writing in a second language is a complex process as it requires writers to compose the message (content), retrieve the linguistic items from their memory, and transform the message into its linguistic representation (Li & Roschan, 2019). In addition, second language (L2) writers need to monitor the linguistic accuracy
of their production and the coherence between the current, preceding, and subsequent sentences. This coordination is a complex process requiring many cognitive and linguistic resources (Kellogg, 1996). Although this process is also complex for native-speakers of English, ELLs engage with additional cognitive processes for L2 writing.

The competition of cognitive and linguistic resources within ELLs often leads to grammatical errors in L2 writing. This is demonstrated in L2 student writing research (Bitchener & Ferris, 2012). The ability to write with morphosyntactic accuracy matters. This is evident within the research as studies suggest that in some settings, university professors and employers find language errors in writing distracting or stigmatizing (Beason, 2001; Janopolous, 1992). This is because the lack of lexical, morphological, and syntactic accuracy in L2 writing may both interfere with the comprehensibility of their message and may mark L2 writers as inadequate users of the language (Ferris, 2002). Therefore, K-12 educators of ELLs have the responsibility to equip their students with the knowledge, strategies and resources they will need to develop their writing in academic English with morphosyntactic accuracy.

This literature review examines the well-researched construct of a common pedagogical practice that directly seeks to lessen the prevalence of linguistic errors in L2 writing through the promotion of morphosyntactic accuracy. Written Corrective Feedback (WCF) represents a well cited and controversial construct in L2 writing research that seeks to increase morphosyntactic accuracy in L2 writing (Bitcher & Ferris, 2012). It begins with a historical and theoretical overview of the perspectives on Error Correction and WCF, specifically in Second Language Acquisition (SLA) classrooms and L2 composition classrooms. This section will review the epistemological and
empirical grounds for the debate. It will also review how WCF has been studied. The review then outlines the typology of WCF as reflected in primary and secondary studies (Ellis, 2008; Kang & Han, 2015). Next, studies involving teacher and student beliefs and preferences for WCF will be included to capture practitioner and learner voices on the role of WCF within L2 writing development. As this study is concerned with the contextual factors of WCF, in addition to teacher and student beliefs, a review of the impact of the COVID-19 pandemic on school closures during the Spring of 2020 as well as the planning for school re-entry in the Fall 2020 will be discussed. The impact will include the role of Computer-Mediated-Communication (CMC) during remote learning and blended learning instructional environments. The review ends with the identification of gaps and the calls for research in WCF as initiated within the literature.

**Historical Perspectives on Written Corrective Feedback (WCF)**

The earliest traces to “error” and “error treatment” within Second Language Acquisition (SLA) can be linked to the behaviorist perspectives during the 1950s and 1960s. During this period, errors were considered more negative than they are today because errors were viewed as an interference with the learning process and should be prevented from occurring (Bitchner and Ferris, 2012). Under this perspective, errors were perceived as a learner’s deficiency and should be avoided. This led to pedagogical recommendations to help learners produce error-free statements such as giving learners opportunities to view and engage in practice of the target forms for a sufficient number of times, which had students spend hours and hours memorizing dialogues, manipulating patterns drills, and studying grammatical generalizations (Bitchner and Ferris, 2012). However, memorization does not lead to spontaneous use or the ability to synthesize
multiple forms. Thus, these recommendations failed and were later questioned by Corder (1967) who argued that errors in L2 development are actually reflections of a natural developmental stage, similar to when children exhibit in acquiring their L1. However, this notion fails to consider the fundamental difference in L1 and L2 acquisition, that the domain specific linguistic mechanisms available in early childhood cannot be used for language learning in adulthood (Bley-Vroman, 1990). This refers to the Critical Period Hypothesis in linguistics and second language acquisition, where older learners of a second language rarely achieve the native like fluency that younger learners display (Marshall, 2000). In addition, it fails to consider the roles of transfer between the first language (L1) into the second language (L2) (Selinker, 1983), which is not available in monolingual L1 acquisition.

More recently, researchers have defined errors in L2 student writing as being “morphological, syntactic, and lexical forms that deviate from rules of the target language, violating the expectations of literate adult native speakers” (Bitchner & Ferris, 2012). Errors are to be expected and the emphasis should not be to avoid errors through memorization of target forms, but rather, errors should be viewed as a natural process that indicates deviation from a target form. WCF in second/foreign (L2) writing contexts has also been referred to as error correction, grammar correction, and treatment of error within the literature (Truscott, 1996, 2007; Ferris, 2002). The contribution of WCF studies to our understanding of L2 development has been the focus of a growing number of L2 research over the last two decades (Li & Roshan, 2019).

In their meta-analysis of WCF, Kang and Han (2015) reviewed Written Corrective Feedback studies and defined the practice as “attempts to rectify errors,
primarily grammatical errors, in L2 learners’ writing and is a common pedagogical strategy in L2 writing classrooms” (p. 2). In other words, WCF is a practice that is ubiquitous in second language classrooms as well as being primarily concerned with grammatical errors. More recently in his study of WCF, Kurzer (2018) explains that WCF “is considered to be any written comment of feedback geared towards improving linguistic accuracy” (p. 5). By synthesizing these two definitions, the understanding and operationalized definition that will be used within this review of the literature is that WCF is any type of comment or feedback given to L2 students on their writing that is mostly focused on grammatical errors and has the intention of improving morphosyntactic accuracy in L2 student writing. Therefore, WCF is future oriented by bringing students’ attention to their grammatical errors with the hope that students will be able to provide the correct linguistic form and/or be able to correct their own writing during revision and/or future writing tasks.

As reflected in the WCF research of over 300 published papers including primary studies, review literature, and meta-analysis (Hyland & Hyland, 2006), teachers spend a great deal of time providing various kinds of grammatical and lexical corrections and feedback on student writing to varying extents with the purpose that such feedback improves students written accuracy and their ability to write. The bulk of the research has investigated whether learners’ L2 writing performance improves after receiving WCF varies as a function of WCF type and error type (Li & Roshan, 2019). It has been stated that the zest for WCF research may have its origins from the L2 classroom where teachers need to know whether and how to deal with students’ errors in their written texts (Guo, 2018). Teachers spend a great deal of time providing various kinds of grammatical
and lexical corrections and feedback on student writing to varying extents with the purpose that such feedback improves students written accuracy and their ability to write. Therefore, it is important for teachers to be informed by empirical studies of how WCF should be incorporated in L2 writing instruction, if the effects are indeed worth the inclusion, and if so how to render WCF effectively.

However, WCF has been and remains the most contentious issue in L2 writing research (Liu & Brown, 2015). Presently, the field of SLA researchers and teachers are still undecided on the potential of WCF for the development of L2 writing (Hyland & Hyland, 2006). WCF has been subject to increasing attention due to the conceptual controversy of its potential to increase grammatical accuracy in student writing, and also, because of its ubiquitous presence in practice (Kang & Han, 2015). Some teachers are not keen on providing WCF, not only because it is time consuming, but perhaps more importantly, teachers do not think students would attend to their WCF and make the best use of it (Guo, 2018). However, for WCF to be effective, teachers must also afford opportunities for students to interact with the feedback provided in meaningful ways, such as revisions or developing a writing portfolio where students analyze the feedback they received. Therefore, the question is not should WCF be rendered, rather, it is how can WCF be efficiently given based on the individual and contextual factors present. Due to the prevalent practice of WCF in L2 writing and the time and energy dedicated by practitioners, further research is required in order to continue building a coherent understanding of WCF and its role within L2 writing development.

**Alternative perspectives of WCF.** Truscott (1996) initiated the debate in his narrative review on the value of WCF by making the case against grammar correction in
L2 writing classes. He explained how a view of correction on learners’ grammatical
errors with hopes of not repeating them in future pieces of writing fails to acknowledge
the complex learning processes underpinning the development of a learner’s
interlanguage: “The acquisition of a grammatical structure is a gradual process, not a
sudden discovery as the intuitive view of correction would imply” (Truscott, 1996, p.
342). However, this claim fails to acknowledge the fact that WCF can assist in the
gradual process by bringing learner’s attention to the grammatical structure that requires
correction.

Truscott (1996) argued that corrective feedback regarding students’ grammar on
writing assignments is not only ineffective, but also potentially harmful and should be
abandoned. In providing a theoretical support, Truscott (1996) argued in the same way
that Krashen (1984) did, that the time spent by teachers giving error correction and by
learners responding to it takes their time and energy away from more important writing
activities. Krashen (1984) makes the distinction between “learning” and “acquisition”.
Students who are taught in a formal form-focused way will “learn” the language but
never fully acquire it. Acquisition consists of rules and principals that are not available to
conscious attention. Truscott (1996) argues that WCF is likely to be only “pseudo-
learning” described as a superficial form of knowledge (p. 345). He refers to a number of
studies to make the point that knowledge which students were taught had disappeared in a
matter of months, indicating that the teaching had produced nothing more than pseudo-
learning. Here, Truscott (1996) is implying that such learning will not be useful for
language acquisition. However, Truscott (1996) conflates WCF as a monolithic group.
WCF comes in a variety of forms that lie within a spectrum of explicit and implicit forms
that is further discussed in the WCF Typology section of this chapter. In addition to the types, the individual and contextual factors must also be considered which can either enhance or mitigate the effects of WCF (Han, 2019). Furthermore, Truscott (1996) considers the acquisition of targeted from based on error free subsequent writing. These claims are based on a cognitive understanding of WCF, where learning is evident through the absence of errors in subsequent writing. However, under a constructivist understanding, the changes in the WCF rendered, along the explicit to implicit spectrum, are also indications that the learner has begun to internalize the linguistic structure.

For example, Truscott (1996) references Semke’s (1984) 10-week study of German students. The study included four feedback treatment groups, including comments on content (not on errors), feedback on errors only, feedback on errors and content, and feedback on errors pointed out and students were expected to make corrections. The results included no significant differences between the feedback groups. Also, the content only feedback group was significantly better than all the others on fluency and on a cloze test, leading Truscott (1996) to argue that “feedback on errors was not only unhelpful, but also harmful to learners” (p. 331). Although Truscott (1996) does not deny the value of grammatical accuracy, “the issue is whether or not grammar correction can contribute to its development” (p. 329). For Truscott, grammar correction is detrimental to learning and even goes on to state that it should be abandoned. However, the reference to Semke (1984) positions all of WCF as error treatment, failing to take into consideration the varieties of WCF and the complexity of the individual student needs present in the classroom. It implies that learning has occurred if the error that was present prior to the WCF provided is no longer present in subsequent writing all
within the 10-week study. Truscott (1996) himself stated that writing with accuracy is a gradual process, therefore the change in the types of feedback providing (from explicit to implicit) would also been indicative of learning (Aljaafreh & Lantolf, 1994; van Lier, 2000; Gui, 2018). Nevertheless, Truscott is adamant is his stance due to the cognitive understanding of learning.

The notion of Truscott’s (1996) argument is based on a theoretical paradigm that is only concerned with the absence of errors versus the development progress is further reinforced when he does take into consideration the differences of WCF. In supporting his position, Truscott (1996, 1999) references a number of studies like Semke (1984) on the failure of grammatical corrective feedback in both L1 and L2 writing and concludes that WCF is not helpful for L2 nor L1 learners. He also concludes that regardless of the differences in contexts, such as second language or foreign language settings, or type of grammatical corrective feedback, such as direct (explicit) or indirect (implicit) feedback, WCF was ineffective. The studies reviewed in Truscott (1996) include English as a Second Language, English as a Foreign Language, German as a Foreign Language, and Spanish as a Foreign Language as well as a variety of Corrective Feedback techniques. Truscott’s argument is, therefore, an empirical stance with data from various L2 contexts to provide support to the argument against grammatical WCF. Truscott has maintained his stance against WCF practice for over 15 years (1996, 1999, 2004, 2007, 2009); however, Truscott has suggested that written WCF may be effective in certain limited situations. Specifically, he concedes that WCF might be useful for editing (1996). He states that editing is not to suggest that this facilitates acquisition. However, under a SCT understanding of learning, processes such as editing using the WCF rendered reflect what
students can do independently in the future with assistance today and is needed for language development.

A substantial amount of recent research argues that WCF research to date has not convincingly proven that error correction helps student writers improve the accuracy of their writing (Gad et al., 2016). For example, Crosthwait (2017) utilized a longitudinal corpus to track student errors over a semester of English instruction that included WCF in various forms; however, the author found no longitudinal reduction in the frequency or types of errors made despite the teacher’s efforts. In addition, researchers have found that from students’ point of view that students do not always understand the WCF provided by their teachers and often fail to remember the meaning of the WCF when making revision (Chandler, 2003; Lee, 2008). This has controversial pedagogical implications. Namely, if WCF is not effective, then why should teachers dedicate time and energy providing WCF to their students? The time should be dedicated to other writing activities as suggested by Truscott (1996). However, these researchers’ theoretical orientation is similar to that of Truscott and failed to acknowledge that the appropriateness of the type of WCF may have impacted the results as the failure to understand the WCF speaks to the lack of relational and engagement affordances provided to the learners.

However, it is important to point out the majority of these studies referenced in Truscott (1996) and within the recent research are experimental and quazi-experimental studies that lack ecological validity, namely what occurs naturally in classrooms when WCF is rendered. In addition, the view of learning stems from cognitive development theories that are only interested in processes in the brain and not necessary the
environment that the learner is situated and what is afforded to him or her. This is further discussed in the Theoretical Frameworks section in this chapter. Lastly, within these studies, learning or the efficiency of WCF is based solely on the absence of errors, rather than reflecting the gradual process as reflected in the changes in scaffolds, supports or assistance that different WCF provides. Nevertheless, researchers did not allow Truscott’s claims to go unchallenged with calls for systematic research that considers WCF and learner factors (Ferris, 1999).

**Proponents of WCF.** Although Truscott provided an intriguing argument that positioned practitioners to reevaluate the time and energy dedicated to WCF, Truscott’s statements did not go without criticism. On the other side of the debate, Ferris (1999) makes the case for grammar correction by strongly objecting to Truscott’s claims. In fact, she states that Truscott’s claims are more harmful to student learning than error correction itself. In defending her position, Ferris (1996) identifies three issues with the research review in Truscott’s paper. First, she points out that the subjects in the various studies are not comparable due to the myriad of different variables present in each study. The majority of studies referenced by Truscott (1996) are in foreign language contexts in a variety of L2s where “foreign language studies are less motivated to revise and correct their work since their language classes do not focus extensively on multiple-draft process-oriented instruction” (p. 4). Secondly, the research and instructional paradigms vary widely across the studies surveyed by Truscott (1996). There are key differences in the research designs (some had control groups others did not), instructional methods (direct versus indirect feedback), subjects and length of time of the study. Therefore, it is difficult to compare and unify the results since the contexts are so different. This lack of
ability to unify and compare studies is not because WCF is ineffective, but rather, is an issue of the body of literature and the methodological designs that has been rendered. It also reflects the complexity of WCF in the consideration of the individual learner factors and contextual factors that shape it.

Researchers have examined the short-term effectiveness of WCF within composition and writing classes where providing WCF to learners would enable them to revise their writing (Truscott & Hsu, 2008, van Beuningen et al, 2008; van Beunigen et al. 2012). The focus of these studies was helping L2 writers improve the accuracy of their drafts. To determine if accurate text revisions are the result of learning, evidence of improved accuracy in the writing of new texts were compared to the texts of L2 writers who received WCF and those who did not (controlled groups). Therefore, if L2 writers were able to improve the accuracy of their writing, as a result of the WCF they had been given, these improvements were regarded as evidence of short-term learning. Across these studies, Van Beuningen et al. (2008, 2012) and Truscott and Hus (2008) found error reduction within revision effectiveness when compared to the controlled group. Interestingly, Van Beuningen et al. (2008, 2012) found WCF not only led to improved accuracy in the text revision but that it also constituted a learning effect which was evident in the improved grammatical accuracy in the new text. Although Truscott and Hus (2008) found error reduction within revision effectiveness, they did not find error reduction in learning effectiveness in the writing of new text when comparing the WCF group with the controlled group. Therefore, these studies indicate that WCF is useful in error reduction within editing, but having inconsistent results with error reduction in new
writing contexts. The inconsistency reflects the differential responses learners have to WCF.

Although the results are united in WCF role as an effective revision tool for error reduction, Truscott and Hus (2008) argued that WCF is not useful as a teaching tool even if it has some limited value as an editing tool. However, the argument is made that because Beuningen et al (2008, 2012) found a learning effect in their studies, the possibility does exist that text revisions, depending on the type of feedback provided, may be able to contribute to learning (Bitchener & Ferris, 2012). Truscott himself (Truscott & Hsu, 2008) acknowledged the fact that WCF was found to improve grammatical accuracy during the revision process, which is indicative of the gradual process of L2 writing development. Perhaps Truscott & Hsu (2008) findings in new writing contexts speak more to the needs of evaluating the types of WCF, the errors being targeted, and the individual and contextual factors of the learner to explain the lack of results when compared to Beuningen et al (2008, 2012).

In step towards ending the debate between Truscott and Ferris, in their meta-analysis of 21 primary studies, Kang and Han’s (2015) research questions included if WCF is generically effective for improving L2 written accuracy and, if so, which types of WCF is more effective? The meta-analysis included Semke (1980) which Truscott included in his argument against WCF. Within the 21 primary studies utilized in the meta-analysis, 6 were within a foreign language context and 15 were in a second language context. Interestingly, only two were within a K-12 setting (Fazio, 2001, van Beuningen et al., 2008) and four studies focused on students with beginning or advanced proficiencies (Semki, 1980; Bitchener & Knoch, 2010; Hartshorn et al, 2010; Evans et al,
2011). Because this is a meta-analysis, the studies utilized had experimental and quasi-experimental designs. Kang and Han found an overall effect size of $g=.54$, which they argue indicates that WCF does have a substantive effect on L2 written accuracy. Therefore, the majority of WCF studies when combined and studied statistically, actually indicates that WCF is indeed effective. This is strongly at odds with what was reported in Truscott’s (2007) narrative review. Therefore, the question is no longer *if* WCF works, but rather, *how best* does it work given a set of circumstances.

The research literature has shifted away from the question of if WCF promotes accuracy to what extent and under what conditions does WCF promote accuracy. The trajectory of the WCF research shifted between 2006 to 2020, where the literature moved away from simply rebutting Truscott (1996) to examining the why and the how WCF works. This is captured in Bitchener and Storch (2016), where the emphasis in WCF studies have moved from if teachers should provide WCF to how best to do so considering the individual and contextual factors.

Most recently in Brown’s (2020) article, the author promotes the use of WCF and identifies seven factors that are to be considered when rendering WCF so that the feedback will likely be motivating and beneficial in the complex process of developing accuracy and self-editing skills for L2 student writers. The seven factors include:

1. WCF is tailored to students’ needs and preferences
2. Involving student in the design of the WCF process when possible
3. Train learners to readily make sense of feedback they receive
4. Equipped students with enough knowledge to respond to the WCF
5. Challenge students with the appropriate amount of WCF (considering he length of writing and in scope of errors)
6. Provide enough time and incentive for students to meet the challenge
7. Develop relationships with students so they perceive positive intentions and encouragement.

Brown (2020) also states that teachers may find more immediate benefit in defining how WCF can be implemented incrementally in looking to improve in their feedback design. Brown’s (2020) claims and those of other proponents for WCF (Ferris, 1999; Kang & Han, 2015; Bitchener & Storch, 2016) are also supported by theoretical frameworks utilized that will be discussed in the following section.

**Theoretical Perspectives on WCF**

This section examines how major theories in second language and literacy development position the role of WCF, specifically error and error treatment, within L2 learner development. Whether to treat errors and how to treat them are of important pedagogical concerns, these theories provide insights in how individuals learn to acquire a second language. Consequently, they provide guidance on what can be done to help learners overcome the errors they make during the process of acquiring the target language.

**Second Language Acquisition Theories**

The majority of WCF research has employed cognitivist theories within Second Language Learning (Storch, 2018) that is primarily concerned with the processes that occur in the brain that lead to learning. Many are based on Information Processing Theory where learning is a process where knowledge moves through stages, from declarative to procedural. A more recent development is the use of constructionist theories within Second Language Learning (van Lier, 2000) that questions if learning can solely be described as processes within the learner’s head. The WCF research that utilizes a constructionist approach incorporated Sociocultural Theory is minimal (Storch,
within a Sociocultural framework, learning is a process that does not only occur in the brain, but through social interaction. In other words, verbal and nonverbal interactions (i.e. feedback and gestures) does not only lead to learning, but it is considered to be evidence of learning itself. Therefore, in addition to the decrease of errors present in student writing, the changes in the types of WCF provided to the learner in response to their writing is indicative of the gradual process of learning. Even with the presence of errors, the changes in feedback is evidence of learning. Whereas in Information Processing Theory, the lack presence of errors by itself demonstrates learning. The subsequent sections will review in depth the characteristics and constructs of cognitivist and constructionist theories in second language learning and WCF.

**Information Processing Theory**

Within cognitive theory, cognitive information processing posits that L2 learning is characterized by a progression from an initial declarative knowledge stage which involves controlled processing of information, to a final procedural stage where knowledge is automatic (Ellis, 2008). This understanding has strongly influenced two L2 information processing models: McLaughlin (1987, 1990) and Anderson (1982, 1985).

**Controlled and Automatic Processing.** Within McLaughlin’s Model, the author views learning a second language as learning a skill, because it involves the acquisition of complex cognitive processing that must be practiced and integrated into fluent performance (McLaughlin, 1987). The author identifies two notions, automatization and
restructuring, are central constructs to cognitive theory. He states that as L2 learner performance improves, there is constant restructuring as learners simplify, unify, and gain increasing control over their internal representations. Therefore, L2 learning occurs when controlled processing shifts to automatic processing during the L2 linguistic restructuring. This process begins with controlled processing. Controlled processing requires high amounts of attention and involves the temporary activation of selected information nodes in the working memory/short-term memory. Through practice, repeated activation of controlled processing sequences results in becoming more automatic. Because short-term memory has limited processing capacity, the shift occurs when the automatized information is then stored in the long-term memory. Thus, freeing the short-term memory to attend to other information. Under long-term memory, the information can be made available rapidly and with minimal attention.

Although McLaughlin did not specify how WCF fits within his information processing model, researchers have made theoretical connections between WCF and McLanguhin’s model (Bitchner & Ferris, 2012; Bitchener & Storch, 2016; Guo, 2018). WCF could draw learners’ attention on specific linguistic forms and activate the processing of the related information which either already exists or is provided in the WCF. For example, if an error is present in the L2 writing with a grammatical feature that has already been instructed to the student, the WCF will lead to the activation of controlled processing to retrieve the information from working memory. Even if the structure targeted by the WCF is new to the learner, it will provide the learner with new information for controlled processing. In either scenario, WCF may activate controlled
processing, thereby indirectly contributing to the final automization of the processing to long-term memory (Guo, 2018).

**Declarative and Procedural Knowledge.** Under Anderson’s (1983, 2000) model of Information Processing, learners first acquire declarative knowledge, which reflects the “what,” like grammatical rules. Learners try to apply declarative knowledge during performance and therefore using the “what.” When learners are able to perform declarative knowledge rapidly, accurately and with little to no conscious effort, procedural knowledge is acquired. Procedural knowledge can be viewed as the “how,” like the use of grammatical rules accurately within one’s writing. Anderson (2000) argues that learning starts form declarative knowledge, and goes through three stages to eventually become procedural knowledge. The declarative stage is where the procedure is learned and stored, such as learning the grammatical rule of adding -ing to a verb to form the present progressive. The next stage is the associative stage, where the learner finds ways to proceduralized the declarative knowledge. For example, the learners add the -ing suffix to verbs during writing, referring to grammatical rules. Lastly, within the Autonomous Stage, proceduralized knowledge becomes increasingly rapid and automatic. For example, the learner adds -ing more rapidly and automatically without consciously referring to the grammatical rules.

Within Anderson’s model, the role of WCF may be to repair or confirm the association between explicit knowledge and performance. As students’ performance in their L2 writing contains errors, WCF can bring the learner’s attention to the discrepancies in their declarative knowledge. With practice in L2 writing and revision, the proceduralization could become increasingly rapid, even almost autonomous.
Therefore, in both information processing models, WCF informs the controlled processing, declarative or explicit knowledge students have of L2 grammar, and through practice, will develop more procedural or automatized skills in using the L2 grammar in their written discourse. Figure 2.1 reflects a model of Information Processing Theory from Kim & Ritter (2013) that shows the movement of knowledge through the declarative and procedural stages through practice.

**Figure 2.1**

*Information Processing Theory (Kim & Ritter, 2013)*

Based on figure 1.2, knowledge moves from declarative and becomes proceduralized through practice. The time to perform the task is the y-axis and the amount of practice is the x-axis. With more practice, the amount of time required to perform the task is reduced, indicative of how knowledge is becoming more proceduralized through automatization.

**Sociocultural Theory**

Vygotsky’s (1978) Sociocultural Theory (SCT) provides a distinct perspective in that learning is not something that goes on exclusively in the learner’s head, but rather, it
is happening in the world where the learner exists. It views learners as individuals that bring many factors to mediate cognitive processing, such as beliefs, attitudes, and other contextual variables (Lantoff & Thorn, 2007). SCT assumes that all cognitive development, including language development, can occur as a result of social interaction between individuals, especially with the more knowledgeable other (i.e. teacher and more advanced learners). For example, when L2 learners have opportunities to collaborate and interact with speakers of the target language who are more knowledgeable then they are may result in language development. Unlike Cognitive Theory and Information Processing Theory, where learning occurs entirely in the learner’s brain, Socio-cultural Theory brings the social and the cognitive into contact through the notion of mediation (Lantolf, 1994).

In SCT, mental activity is organized through culturally constructed artifacts such as motivation and perceptions (Vygotksy, 1978). Vygotsky identifies language as the most powerful artifact available for mediating thought. Language is therefore not only a means of accomplishing social interaction, but also a means of managing mental activity. For L2 learners, the target language serves as the object of their attention and the tool for mediating acquisition (Swain, 2000). SCT views learning and language learning as dialogically based, and that acquisition occurs in and not as a result of interaction (Guo, 2018). Therefore, L2 development is a shared process between the individual and other persons and does not occur within a vacuum.

**Scaffolding.** Lantolf and Thorn (2007) suggest that L2 learners can achieve higher levels of linguistic knowledge when they receive appropriate scaffolding. The scaffolding metaphor represents the process of support that involves a shift form
collaborative inter-mental activity to autonomous intra-mental activity. In the process of learning, learners initially experience a process of “other-regulation,” which is provided by teachers and more advanced learners. Eventually learners can be self-regulated such as being able to use the L2 autonomously. Therefore, the process of learning or development occurs through the shift of other regulatory (collaborative inter-mental activity) to self-regulatory (autonomous intra-mental activity). The process within this shift occurs through supportive dialogue which directs the attention of the learners to key feature of the environment. The prompting through successive steps is known as scaffolding (Wood, Bruner, & Ross, 1976). WCF can be understood as scaffolding through a written dialogical exchange, where the teacher provides WCF on the incorrect use of targeted linguistic forms, which represents a form of other regulation. Through this collaborative inter-mental activity, the learner’s attention may be drawn to the specific features and assist the learner to achieve self-regulation. The movement from other-regulation to self-regulation is captured in the Zone of Proximal Development.

Zone of Proximal Development (ZPD). The ZPD is yet another metaphor representing the domain where learning can productively take place. Here the learner can achieve the desired outcome through scaffolded assistance from teachers or more capable peers. Through social interaction, learners move within their ZPD from their actual developmental level to their potential development level in order to achieve independent functioning or self-regulation (Vygotsky, 1978). SCT posits errors as reflections of the learner’s struggle to self-regulate when the task is demanding. Therefore, the errors may not always reflect a lack of knowledge and the learners may instead need to re-establish self-regulation (Guo, 2018). With this understanding, the learner may need more
scaffolding or other-regulation. WCF of varying degrees of explicitness provides different levels of scaffolding. The more explicit the WCF, the more the scaffold represents other-regulatory and, therefore, farther away from self-regulatory or autonomous functioning. However, because each individual is different and respective ZDP unique, it can be understood that WCF type and error type may result in different levels of effectiveness for each individual learner. Thereby requiring different levels of explicit WCF scaffolding based on individual characteristics, such as language proficiency.

**Regulatory scale.** The differences in scaffolding within the ZPD is reflected in Aljaafreh and Lantolf (1994) study that utilized a regulatory scale of corrective feedback. In their longitudinal case study, they examined the interaction between a tutor and three ESL students in five individual consultations over eight weeks. Each session reviewed different compositions and targeted four linguistic structures. The tutor read each composition before the consultation but did not provide any WCF. Instead feedback was provided orally and was guided by the regulatory scale created by the researchers. See figure 2.2 for the regulatory scale created by Aljaafreh and Lantolf (1994).

The regulatory scale represented scaffolds of assistance with 12 levels (0-12). The feedback starts with level 0 where the learner re-reads their texts in the process of self-regulation and corrects any errors independently before the tutor session begins. Implicit strategies began at level 2 with the tutor prompting the learner or engaging the learner in focused reading of the sentence that contains the error. Depending on the learners’ response, the assistance becomes more specific and explicit if necessary. On the other end of the scale includes the most explicit forms of assistance (levels 10-12).
which involves providing the learning with the correct form. The regulatory scale shows on WCF practices reflects a range of implicit and explicit scaffolds and that student require different WCF types based on where they are within their Zone of Proximal Development with the targeted linguistic feature. Movement along the regulatory scale provides insight to the development and internalization process.

**Figure 2.2**

*Regulatory Scale (Aljaafreh & Lantolf, 1994)*

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**FIGURE 1**

Regulatory Scale—Implicit (strategic) to Explicit

0. Tutor asks the learner to read, find the errors, and correct them independently, prior to the tutorial.
1. Construction of a "collaborative frame" prompted by the presence of the tutor as a potential dialogic partner.
2. Prompted or focused reading of the sentence that contains the error by the learner or the tutor.
3. Tutor indicates that something may be wrong in a segment (e.g., sentence, clause, line)—"Is there anything wrong in this sentence?"
4. Tutor rejects unsuccessful attempts at recognizing the error.
5. Tutor narrows down the location of the error (e.g., tutor repeats or points to the specific segment which contains the error).
6. Tutor indicates the nature of the error, but does not identify the error (e.g., "There is something wrong with the tense marking here").
7. Tutor identifies the error ("You can't use an auxiliary here").
8. Tutor rejects learner's unsuccessful attempts at correcting the error.
9. Tutor provides clues to help the learner arrive at the correct form (e.g., "It is not really past but something that is still going on").
10. Tutor provides the correct form.
11. Tutor provides some explanation for use of the correct form.
12. Tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action.

As reflected in figure 2.2, the more implicit the level, the closer the learner is to self-regulation, the more explicit the level, the more other-regulation is needed by the student. In Aljaafreh and Lantolf (1994), learner language development was measured
through two criteria, accurate language use, and the level of assistance on the regulatory scale. Within the ZPD, step 0 reflects the student’s potential level where self-regulation is employed, and step 12 reflects what the student can actually do with other-regulatory support. Steps 1-11 reflect the scaffolding that can guide the students to transition from other-regulatory to self-regulated (autonomous learner) within their ZPD. Figure 2.3 depicts how the movement from explicit to implicit scaffolds should be rendered based on the student’s performance as scaffolding is both contingent and gradual.

**Figure 2.3**

*The movement of scaffolds from explicit to implicit within the ZPD*

The findings in Aljaafreh and Lantolf (1994) showed different trajectories of development for each learner, depending on the grammatical structure targeted and the learner’s level of required assistance. Although this corrective feedback on L2 writing
took the form of oral interactions, the explicitness of WCF types can be viewed along a regulatory scale, from explicit (other-regulatory) to implicit (self-regulatory) practices. The section on the “Typology of WCF” in this chapter will reflect further on the explicit-implicit spectrum of WCF practices.

**Ecological Perspective on Language Learning**

From SCT comes the ecological perspective that includes the bioecological model from Bronfenbrenner (1979, 1993) and the ecological concept of affordance from Gibson (1979). Unlike the scientific approaches to language learners research that assumes that learning is the result of computational processes in the brain (i.e. Information Processing Theory), an ecological perspective provides an alternative view of learning as a brain-resident within an environment where learning occurs through a symbiotic relationship between learner and their environment (van Lier, 2000). In second language learning research, the literature has historically tended to look for evidence of learning through tangible and countable linguistic objects of some kind.

Van Lier (2000) describes that the ecological approach should identity events where learning emerges. The author uses the metaphor of looking for evidence of learning via linguistic objects as “reaping,” while identifying events of learning through emergence within contexts as those that Bronfenbrenner describes as “sowing” (p. 225). This serves as a critique of cognitivist theories when compared to constructionist theories, where the former is only interested in the presence of fruit or product of learning, while the latter is interested in both the fruit and the cultivation of learning. Therefore, the understanding of language learning under an ecological perspective is not just on the acquisition of morphosyntactic forms, but considers learning to be both the
acquisition and the processes of arriving to the acquisition. Therefore, a more appropriate terminology, from an ecological perspective to language learning, should be language development rather than language acquisition.

The ecological approach aligns well with the key tenets of SCT in that learning occurs through social interaction, and that learning does not necessarily reside solely in the brain. Unlike cognitivists theories in their limited lens of learning, an ecological perspective within constructionist theories such as SCT views learning as emergent, ecological and semiotic in the sense that it is perceptual, contextual, and social. Thus, language development is not the takeaways that learners are able to perform, but rather, language development is the co-construction between the learner and their environment through social relationships and what has been afforded to the learner from their environment.

**Affordance.** Gibson (1979) was the first to coin the word affordance to refer to the reciprocal relationship between an organism and a particular feature of its environment (van Lier, 2000). Affordance is neither the organism nor the object, but rather, the relational between the two. This positions language development as requiring not only the material or product, but also, a relational one between learners and their environment. Therefore, in order to ensure the equity and access to learners, especially ELLs, we must provide two types of affordances. One includes language rich environments that provides opportunities or affordances for language development, what the literature identifies as first order affordances (Larsen-Freeman, 2016; Cameron, 2015). This can take the form of differentiation, technology integration, and the provisions context rich environments, just to name a few examples. These examples
illustrate that first order affordances all involve manipulating properties in the environment for language development.

In addition, teachers must also provide second order affordances. Second order affordances guide and engage students to perceive and act upon the communicative affordances in the environment. This is accomplished by managing the relationships between learners and the environment so that learners can directly perceive and act on the ambient language around him or her (Anderson, 2015 as cited in Larsen-Freeman, 2016). Larsen-Freeman (2016) explains that in order to engage students, the materials must be perceived by students as something that they can learn from and that are important to their learning. Without second order affordances, first order affordances are meaningless.

**Culturally Responsive Practices.** The understanding of second order affordances as managing relationships between students and their environment in a way that it is perceived by students as relevant for active engagement is reinforced by instructional approaches such as culturally relevant pedagogy (Ladson-Billings, 2014, 1995), culturally responsive teaching (Hammond, 2014), and culturally sustaining pedagogy (Paris, 2012). These approaches promote authentic engagement and rigor among culturally and linguistically diverse students. From an ecological perspective in second language development, in order for educators to engage students with affordances, these opportunities must be authentic to them (Larsen-Freeman, 2016).

Paris (2012) advocates for pedagogical practices that are responsive of or relevant to the cultural experiences and practices of young people by sustaining the cultural and linguistic competence of their communities while simultaneously offering access to dominant culture competence. The pedagogy seeks to foster linguistic, literacy and
cultural pluralism as part of the democratic project of schooling. Ladson-Billings (2014) underscores the need to incorporate the multiplicities of identities and cultures that help formulate today’s youth culture where instead of focusing singularly on one racial or ethnic group, we must consider the global identities that are emerging in the arts, literature, music, athletics and film. Hammond (2014) clarifies that culturally responsive practices are more of a process than a strategy, beginning with the teacher to recognize the cultural capital and tools students of diverse backgrounds bring to the classroom. The common thread weaved across these three authors is that at its core, teachers have to get to know and build relationships with the individual students in order to better address student learning. The relationship building and student engagement within culturally responsive teaching are second order affordances. Without second order affordances, students will not perceive or engage with first order affordances (e.g. materials, tasks) which is critical in the learning process. The learners' deferential responses to affordances reflects the extent to which they are mirror their environment. In learning about student’s behaviors, backgrounds, and challenges learners face will better equip teachers building relationships with their students and in their provision of first order and second order affordances.

Culturally responsive researchers (Lansen-Billings, 1995; Paris, 2012; Hammond, 2104) provide a powerful strategy in affording students with opportunities for learning that are relevant and sustaining to them. It is to also be aware of one’s personal biases that often times are implicit that shaped the mindset, influence pedagogical decisions, and the provisions of affordances made to students, as well as in the relationship building with the teacher. Another strategy is respecting and reinforcing student culture as each
individual student reflects a set of behaviors, beliefs, and characteristics that make that student unique. It is imperative to validate each student by connecting their outside experiences, daily life, and background knowledge to their classroom experiences so that learners see themselves represented in the classroom environment. This can be achieved through many different ways, providing opportunities and encouraging students to share and listen to each other on their feelings, beliefs, values and perspectives, while being taught to receive and embrace this information while still honoring the differences among them. Instructional activities should provide opportunities that allow students to celebrate both their own culture and those of others within lessons. This provides continuity within the learners’ classroom and out of classroom environments and experiences.

In this view, WCF can be depicted not only as scaffolds provided by teachers based on the learner’s ZPD, but also, as affordances provided to L2 writers to develop and sustain their writing in English. ELL students would need to perceive the WCF rendered and find it relevant to their L2 writing development in order to engage in it. The various types of WCF provided to ELLs are first order affordances as it reflects the products of the linguistic system. How the teacher manages the relationship and engagement between students and the WCF are second order affordances as students would need to perceive it and find relevance to their L2 writing development. An overview of the various types of WCF will be described in the subsequent section to reflect the myriad types of these first order affordances teachers can provide to students as well as the range of explicitness and implicitness of these different types of WCF.
Typology of Written Corrective Feedback

There are many types of Written Corrective Feedback that vary by teacher and institution (Leki, 1990). Bitchener, Young and Cameron (2005) and Ellis (2009) identified research evidence on the effect of different feedback strategies to improve grammatical accuracy. These types include **direct**, **indirect**, **metalinguistic**, **focused**, **unfocused**, **electronic**, and **reformulation**. In addition, these types can be employed in a variety of ways with varied levels of comprehensiveness and explicitness of the feedback. Therefore, WCF approaches are classified below into three categories: type, explicitness, and scope.

**WCF Types**

**Direct and indirect WCF.** A distinction is made between direct or explicit feedback and indirect or implicit feedback. In defining the two, Bitchener and colleagues (2005) state that explicit feedback happens when the teacher identifies an error present in their student’s L2 writing and corrects the error by providing the correct form. With indirect WCF situations, the teacher indicates that an error has been made by the student but does not provide the correction, therefore positioning the students to diagnose and correct it for themselves. Therefore, WCF represents a spectrum of explicit and implicit practices that engage students into different cognitive tasks when it comes to error correction.

**Metalinguistic WCF.** This is further elaborated by Ellis (2008) and his typology for a systematic approach to investigating the effects of WCF. The typology further categorizes types of WCF beyond the direct and indirect types. He includes an additional type, metalinguistic WCF, where the teacher provides some kind of metalinguistic clue as
to the nature of the error. The teacher can either use an error code, directly or indirectly, and/or provide brief grammatical descriptions for each error at the margins of the text (Sheen, 2007; Chandler 2003; Ferris & Roberts, 2001; Lalande, 1982). Direct and indirect error coding both represent a less explicit practice compared to providing the actual correct form. However, direct metalinguistic WCF indicates both the location and the grammatical error that has occurred, making this WCF more explicit than indirect metalinguistic WCF. Indirect metalinguistic WCF can include the provision of a metalinguistic cue or explanation, but does not specify the exact location of where error occurred. For example, an indirect error coding within the margin indicates there is an error by using the error code, making the student determine where within the sentence or paragraph the error resides for correction. In comparison, direct error coding would indicate where exactly the error is, not requiring for the student to make that determination. However, when compared to the other end of the spectrum, error coding both directly and indirectly, are more explicit WCF practices than indirect WCF without error coding. Indirect WCF within metalinguistic cues is where the teacher just indicates that an error is present and the student is positioned to determine both the location and grammatical nature of the error. Therefore, the varied combinations of WCF provide an enriched range of levels of explicitness.

Electronic WCF. With the advancement of technology, electronic WCF feedback is where the teacher indicates an error, either directly or indirectly, and provides a hyperlink to a concordance file that provides examples of sentences with the correct usage of the target form for the student to correct their own writing (Ellis, 2008; Milton, 2006). This WCF practice is more explicit than indicating to the student simply that an
error exists and the student must correct using their prior knowledge. However, at the same time electronic WCF feedback represents a less explicit task than directly providing the target form, providing a metalinguistic error code and/or explanation. Instead, students utilize authentic texts to generate their own grammatical rules based on the concordance file and apply that knowledge to the error correction.

**Reformation WCF.** Lastly, reformulation WCF consists of a native speaker’s reworking of the students’ entire text to make the language seem as native-like as possible while keeping the content of the original intact (Ellis, 2008; Sachs and Polio, 2007). This represents the most explicit form of WCF within the spectrum.

**Explicitness of WCF**

Based on the types reviewed above, there is a range of explicit and implicit forms of WCF on the spectrum depending on the types of WCF teachers provide to students. Depending on the needs of students based on their prior knowledge of the grammatical form, practitioners should be strategic in the level of explicit WCF that is required. For example, WCF practices serve as scaffolds for student correction during the writing process. If students do not have the prior knowledge of the target form based on their proficiency level or the target was not yet taught, more direct WCF practices would bring student attention to the error while providing the input needed by the student to correct it. However, if the student does have the prior knowledge, or the capacity to generate for themselves the grammatical rules for error correction, less explicit WCF (i.e. indirect electronic WCF) would benefit this student.

Ferris (1999, 2002) argues that WCF, if unambiguous and consistent, can lead to fundamental improvement in learners’ grammatical accuracy. Ferris (2002) reported that
direct error correction led to more correct revisions than indirect error feedback. This may be a result from students knowing exactly what was needed to be addressed in order to revise, whereas the indirect students may be incorrect in addressing the error. However, it was noted that students who received indirect feedback reduced the frequency of their errors, over time, substantially more than those who received direct feedback. This suggests that direct written corrective feedback provides more immediate gains; whereas indirect provides slower, but more durable gains.

Storch (2018) also states that WCF can be viewed as two ends of a continuum of scaffolded feedback. Therefore, the goal should be for any student, especially L2 learners, is the gradual movement from explicit to implicit scaffolds within the spectrum in order to promote student autonomy in self correction and in the development of grammatical accuracy (Aljaafreh and Lantolf, 1994). To capture how the aforementioned WCF types fall along the explicit-implicit spectrum, an original diagram for this literature review was created and represented below as a visual in figure 2.4.

**Figure 2.4**

WCF practices along the explicit-implicit spectrum

From a SCT perspective, the findings in Ferris (2002) reinforces the WCF recommendation to systematically transition L2 students from explicit to implicit
scaffolds. The different types of WCF can be viewed along the spectrum of explicit and implicit feedback practices, where the WCF intervention moves towards the implicit end of the scale. This is considered to be moving towards more independent and self-regulated performance and, therefore, was consequently taken as positive evidence of learning (Aljaafreh & Lantoff, 1994). In turn the departure from more explicit or other-regulatory scaffolds such as direct WCF constitutes evidence of language development with the learner’s Zone of Proximal Development (ZPD).

Within an Information Processing perspective, the implication for practice is the need to shift from direct to indirect WCF once the student begins to automatize or proceduralize the accurate morphosyntactic structures in order to promote and develop student self-correction during the writing process. As students gain practice from the explicit WCF, they will develop their declarative and procedural knowledge on the targeted linguistic forms (Anderson, 2000). In parallel to SCT, implicit WCF will then increase the internalization need for self-correction, reflecting the transition of gradually removing scaffolds and developing learner autonomy, which is the goal of any classroom endeavor (Storch, 2018). Once the linguistic structures are internalized (SCT) or automatized (Information Processing Theory), the morphosyntactic accuracy of the learner will increase in their L2 writing.

**WCF Scope**

**Focused and unfocused WCF.** WCF can differ in the scope of the feedback as it may be focused or unfocused (Ellis, 2008; Sheen, 2007; Ferris, 2006; Chandler, 2003). Unfocused (extensive or comprehensive) WCF is where the teacher corrects all the grammatical errors as they read through the students’ papers. Focused WCF (intensive)
is when the teacher is selective in the corrective feedback they provide. Focused WCF is strategic in the sense that the teacher is focusing on one or two specific types of errors to correct for an error that perhaps were addressed during a lesson and the grammatical feature was emphasized. Focused and unfocused WCF may lie in multiple levels within the explicit-implicit spectrum. For example, direct feedback (more explicit that indirect feedback) can be both intensive (focused) and extensive (unfocused). Therefore, focused and unfocused WCF should not be viewed along the explicit-implicit spectrum as it is paired with direct or indirect practices.

**Individual and Contextual Factors That Contribute to Written Corrective Feedback**

In her argument for a WCF research agenda from a sociocultural theoretical perspective, Storch (2018) calls for longitudinal classroom-based studies or qualitative cases studies as she argues that many recent studies have become too narrow in scope. Specifically, she states that most WCF recent studies (post 2005) pay little attention to context-related and individual variables such as individual goals and beliefs, and to whether the feedback provided takes into consideration the learner’s changing needs. This call echoes Ferris (2006) who noted that the individual variation in student’s ability to utilize and process teacher feedback successfully has been largely unexplored. As reflected in the literature review thus far, much of the WCF research is concerned at the text level, specifically the linguistic features where the error occurs, the WCF that is given, and the effect the WCF has on students L2 written performance in subsequent writing. Perhaps the systematic study of the individual and contextual factors as it relates to WCF from an SCT and ecological perspective would reconcile these studies that focused from a cognitivist lens.
Student and Teacher Beliefs on L2 Errors and Written Corrective Feedback

Providing feedback on students’ writing is regarded as an important pedagogical practice for teachers, who hope that their WCF will help their students improve their L2 writing skills and language accuracy (Bitchener, 2002; Hyland, 2006). Leki (1991) performed a study surveying students’ attitudes towards WCF in a college-level English writing classes. The author surveyed 100 English as a Second Language (ESL) students and asked questions such as how concerned they were with their written errors, what they thought were the most important features in their writing that the teacher should attend to, and what they looked for when receiving a graded paper from the teacher. The results concluded that students believed that good writing should be error-free, and the majority wanted all their written errors to be corrected.

Based on Ellis’ (2008) typology of WCF, the results form Leki (1991) suggest that WCF should be unfocused or comprehensive, meaning that students wanted all their errors corrected. However, this may have been a result of the population surveyed. According to Leki (1991), the ESL students surveyed scored at least 525 on the Test of English as a Foreign Language (TOEFL) and were enrolled in U.S. post-secondary education. These students have an intermediate proficiency or higher since the submission of TOEFL test scores is a requirement for admission of non-native English speakers to many institutions of higher learning in the U.S. Typically, a score of 525 is an acceptable score for admittance (Leki, 1991). The author described these students as already having prior knowledge of English grammar and are actively seeking to increase the accuracy in their writing as these students were enrolled in specialized sections of freshmen English courses for non-native English speakers. In addition, Leki (1991)
admits that the English Learners’ attitudes towards error correction were most likely based on language learning experiences in their home countries within a foreign language context. However, it is important to consider that for students with low to no proficiency in English, to correct every single error may discourage beginner students.

**Misalignment between student and teacher WCF beliefs.** Amrhein and Nassaji (2010) surveyed 33 adult ESL students and 31 ESL teachers from two private adult English language schools. The survey contained questions to shed insight if teachers and students’ beliefs on the utility of written corrective feedback, as well as the amount and the type of WCF preferred. In the first question, participants were asked whether they think that teachers should mark: a) all errors, b) mark all errors but not minor ones, c) mark most major errors but not necessarily all of them, d) mark only a few errors, e) mark only errors that interfere with communicating ideas, f) mark no errors, respond only to ideas and content. The findings of the survey found that the majority of participants, both students and teachers, believe that teachers should mark all errors. Interestingly, students overwhelmingly choose “option a” (93%) while teachers who chose “option a” were less than half (45.2%) with the rest of the teachers dispersed among the other options.

The results of Amrhein and Nassaji (2010) align with Leki’s (1991) findings that the majority of students believe that WCF is necessary and, most interestingly, they want teachers to correct all of their written errors. However, the same issue is raised with regards to the student population targeted in the survey. The proficiency levels of the students in both studies were selected from upper-intermediate and higher within higher education contexts. Amrhein and Nassaji (2010) stated that it is was important that
participants were proficient enough in reading and writing English to understand the questionnaire items and to provide reliable responses. The authors admit that beginner students were available for the study, but their input was not considered. Perhaps to include students with beginner proficiency while ensuring the reliability of their responses, the survey could have been provided in the student’s home language to gain their perspective. These survey findings also appear to be in conflict with Ferris (2002), where WCF should be more strategic and systematic rather than correcting all errors without prejudice (unfocused or extensive WCF). Therefore, considering the desires of students, the teacher should differentiate WCF through the use of explicit and implicit forms of feedback based on the students’ knowledge of the target forms and their capacity to engage in different cognitively demanding tasks for self-error correction. However, it appears to be an empirical question as to what are the actual WCF practices engaged in by teachers at the K-12 education level.

**Misalignment between teacher WCF belief and practice.** In addition to the misalignment between teacher and student beliefs on WCF, there is further misalignment between teacher belief and practice. Teacher decisions on WCF are strongly influenced by their prior language learning experience, their teacher education, and their contextual experience as educators (Shae Mao & Crosthwaite, 2019). Yet, researchers have noted that teachers’ practices do not always reflect their beliefs, leading to misalignment or tension (Lee, 2008). Shao Mao & Crosthwaite (2019) researched teachers’ beliefs and their actual WCF practice in English writing course within a university in China. They found that teachers frequently employed a focused and indirect approach when providing WCF. The authors also found areas of alignment and misalignment regarding teacher’s
beliefs on WCF and their actual WCF practices through collections of student work with the teachers’ WCF, survey data, and semi-structured interviews. Teachers believed they provided large amount of focused feedback rather than unfocused feedback, which aligns with the results. However, teachers mistakenly believed they provided more direct WCF than indirect WCF (which contradicts the study’s findings). An implication is that teachers should reflect between the approach they had in mind and their delivery to review the alignment that was intended.

**Impact of student beliefs on WCF for L2 Writing.** In their study, Rummel & Bitchener (2015) examined the effectiveness of WCF on the simple past tense on 42 advanced EFL Lao learners. The authors collected the preferred WCF from these students. They then created 3 feedback groups and a control group that didn’t receive any WCF. While some participants in the treatment groups received their preferred WCF treatment and others did not. The authors did not find any statistically difference across the three feedback groups nor against the control group. This could be due to the high proficiency of these students. However, the authors also found that the students who received the type of feedback that they believed to be most effective were able to eliminate the targeted error category from their writing while the other students were not. This suggests that beliefs might have impacted on the extent to which the Lao students improved their linguistic accuracy.

**Interaction between context and individual learners on WCF**

Han (2019) answered the call from Storch (2018) by engaging in a case study approach to understand students’ experiences as lived in their context. The case study took place within a university setting in China, where non-English major students took a
level four English course that emphasized writing. Based on the description of the level 4 English course, it appears the students were high-intermediate or low-advanced in English compared to the other levels (1-5). Data were collected from two students and the teacher. Although Han (2019) engages in new research, the contexts mirrors those of previous studies reviewed, such as setting (post-secondary, aboard) and participant (those with higher proficiency levels in English). Nonetheless, the study was novel as it took an ecological perspective to explore two Chinese EFL learners; engagement with WCF and contributed to WCF research by reconceptualizing the construct of learner engagement and investigating how learner factors and contextual factors mediate engagement.

The findings in the WCF case study found that the two students experienced different engagement with WCF even though the students were in the same class, received the same teacher instruction and teaching materials. Han (2019) found learner factors and contextual factors to have impacted the differences in engagement with WCF. Two categories surfaced from the analysis with regards to learner factors, capacity-related factors, willingness-related factors. Capacity-related factors included L2 abilities and metalinguistic knowledge. Willingness-related factors are beliefs and motivations. Contextual factors included four categories, the factors are: textual level factors (characteristics of WCF and the errors receiving that WCF), the interpersonal and interactional level factors (relationship with the teacher and other students, the interaction between teachers and students with regards to WCF), the instructional level factors (teacher instruction, teaching materials, the curricular goals, student access to resources), and the sociocultural factors (the role of teachers and students).
Through the analysis of the above factors and the interaction between them, Han (2019) found alignments and misalignments with engagement with WCF. The relationship is formed as learners explore learning opportunities afforded by WCF and other related learning resources (e.g. teacher instruction, the computer, peers, etc.) embedded in the context and act upon the opportunities that students deem accessible and useful. The data found that contextual factors and learner factors sometimes create synergy to enhance engagement, whereas other times contextual factors and learner factors conflict with each other causing a decrease in engagement. Specifically, the case studies data suggest that the congruence between available learning opportunities that WCF and other resources afforded to the students and the students’ willingness and capacity to perceive and act upon these opportunities largely contributes to individual students’ engagement with WCF.

Han (2019) identified three conditions when learning opportunities afforded to students align or misalign with learner capacity and willingness in WCF situations. In one condition, there is engagement with WCF as the affordances are perceived and used by the student. For example, there was alignment between learner and contextual factors when perceiving the importance of feedback with metalinguistic codes, which the student had prior knowledge to decipher the WCF provided to her writing. A second condition is when there is misalignment or where affordances are perceived by the learner but it is not used. For example, this occurred when one student chose to regard content feedback as more important and helpful, thus sidelining most WCF and choosing not to discuss linguistic errors with the teacher. The last condition discovered was also of misalignment, where there is a lack of engagement due to affordances not being
perceived by the learner at all or perceived but poorly used. For example, the student failed to comprehend the teacher’s instruction about the writing conference and about coded WCF. The three conditions of learner engagement with WCF can inform subsequent case students as it relates to the contextual and individual factors that shape learners’ responses to the feedback provided and/or that shape teachers’ feedback practices.

The recent WCF scholarship, when considered together, portray a complex and dynamic process of how WCF is effective and, at times ineffective, and how the individual and contextual variables influence learner engagement, attention, and learning (Han, 2019; Bitchener and Storch, 2016). These variables range from student and teacher beliefs in and experiences with WCF, to the L2 proficiency levels of students, and includes the types of the WCF utilized. Most importantly, the surrounding ecological context must be considered. The location and current environmental factors are also critical in the analysis of the individual and contextual factors that contribute to the effect WCF may have. Location, telecommunication, media and environment factors have been completely disrupted during the COVID-19 pandemic. The following section will discuss how the pandemic that has impacted learning, as a result in school closures, social distancing, the shift to hybrid and remote learning contexts.

**COVID-19 Pandemic, school closures, and impact on learning**

The global COVID-19 pandemic had infected more than 11 million people worldwide, killing more than 525,000, and with more than 6 months into the pandemic (McNeil Jr., 2020). At the height of the COVID-19 pandemic during the Spring of 2020, as the coronavirus spread across the globe, many countries had decided to close schools
as part of a physical distancing policy to slow transmission and ease the burden on health systems. In fact, the UN Educational, Scientific and Cultural Organization estimated that 138 countries had closed schools nationwide, severely impacting the education of children globally (Wim Van Lancker, 2020). Therefore, the world as we know it has experienced a rupture in the educational progress for an entire generation of children which has critical implications for our collective future.

It has been argued (Wim Van Lancker, 2020), that school closures for prolonged periods of time could have detrimental social and health consequences for children living in poverty, and are likely to exacerbate existing inequalities. Children from low-income households live in conditions that make home schooling difficult where online learning environments usually require computers and a reliable internet connection. In New York City, where a large proportion of COVID-19 cases in the USA have been observed, one in ten students were homeless or experienced severe housing instability during the previous school year (National Center for Homeless Education, 2019). In addition to issues of stable housing needed for WIFI, children from lower income households are likely to struggle to complete homework and online courses because of their housing situation as the ongoing pandemic is expected to lead to a severe economic recession, which will impact children’s health, wellbeing, nutrition and learning outcomes (Wim Van Lancker, 2020).

Research has shown that the abrupt switch to remote learning during the Spring of 2020 has placed students in the U.S. to fall months behind during the school closures, thus widened racial and economic gaps (Goldstein, 2020). As virtual classrooms and online learning proliferated in school districts throughout the nation, research is working
to identify what works and what doesn’t. Cary (2020) argues that the last term of the 2020 school year was a hard lesson for the educational system in what virtual classes could and could not provide. He states that the content is present in online learning platforms; however, virtual education will depend for its success on “old-school principles” which includes creativity, attentive teaching, and patient support from parents.

As the COVID-19 pandemic continues to persist, school districts were planning what the re-entry would look like during the Fall of 2020. Mayor de Blasio announced on Wednesday, July 8th, that public schools would not fully reopen in September, saying that classroom attendance would instead be limited to only one to three days a week in an effort to continue to curb the COVID-19 pandemic (Shapiro, 2020). NYC Department of Education had released a plan to show multiple examples of scheduling for blended or hybrid learning, where students would receive a percentage of instruction synchronously and/or asynchronously when students are home and a percentage of instruction in person (NYCDOE, 2020). Many New York districts planned and implemented multiple scenarios or tracks, including hybrid learning and the option for a fully remote learning scenario.

Gaps in the Research

Due to the controversy surrounding WCF with regards to the inconsistent research findings in the (in)effectiveness, types, student and teacher beliefs, few teachers are waiting for concrete empirical support and instead provide WCF based on intuition, experience, and student expectations (Brown, 2020; Ferris, 2011; Hyland & Hyland, 2006). The majority of WCF researchers’ attention is emphasized on the efficacy of
WCF on writing accuracy or skill development (Shae Mao & Crosthwaite, 2019). Overwhelming these studies take place within post-secondary academic settings within English as a Foreign Language (ELF), English as a Second Language (ESL) and World Language classrooms. In their methodological synthesis of 44 WCF primary studies, Lui and Brown (2015) found that the most frequently sampled group of participant contains learners from mixed L1 backgrounds (50%), while English remains the predominate L2 (75%). In addition, almost half of the participants (48%) are from the intermediate proficiency group, positioning beginning and advanced proficient learners under-investigated. Even more problematic, the most heavily sampled populations are postsecondary students (75%) and adult learners (86%). This emphasizes the need for more attention on K-12 learners with regards to WCF research.

Hyland and Hyland (2006, p. 84) performed a narrative review on WCF noting the difficulty in drawing any clear conclusions and generalizations from the literature as a result of varied populations, treatments and research designs. This reinforces the argument made by Ferris (2002) in the difficulty to draw any clear conclusions and generalizations across the literature due to high variations of contexts, participants, duration of study. Kang and Han (2015) examined 22 WCF studies, 18 published and 4 unpublished. The studies selected were all concerning L2 written corrective feedback and utilized either an experimental or quasi-experimental design that included a control group. A major finding is that WCF does have a substantive positive effect on L2 written accuracy. However, no significant differences were found between the type of feedback (direct and indirect), nor in the scope of the feedback (unfocused and focused). More research on the type of feedback, scope of feedback, and their effects is needed to gain a
better understanding of these factors. The authors concluded that “we are still falling short of a clear understanding of the effects of written feedback on the development of L2 Learners’ written accuracy” (Kang & Han, 2015, p. 2).

Kang and Han (2015) also identified what factors may mitigate the effects of WCF. Language proficiency stood out as the strong variable that mitigated the effect size. Larger effect sizes appear as proficiency levels went up. The effect was negative when it was given to beginners. The majority of studies predominantly reflect intermediate or higher levels of language proficiencies while those with beginner proficiencies were captured in only one study within the meta-analysis. Nevertheless, most L2 researchers agree that there is a role for WCF in L2 writing classes; however, many unanswered questions remain concerning the linguistic features to target and the type and amount of feedback to offer (Benson & DeKeyser, 2018). Researchers have called for further research on which types of WCF are more effective, examine the interaction between different feedback strategies with other variables, including learners’ L2 proficiency and their preference for explicit and implicit learning (Kan & Hang, 2015).

Research Implications

As mentioned above, Storch (2018) calls more WCF studies using qualitative case studies that consider the contextual and individual factors that impact WCF. She argues that most recent studies are largely experimental and quazi-experimental studies that lack ecological validity. Both Storch (2018) and Han (2019) state that studies with an ecological perspective are rarely used in the area of WCF and it provides alternative conceptualizations of WCF to those offered by cognitive theories in Second Language
Acquisition that are prevalent in WCF research, such as McLaughlin (1987, 1990), Anderson (1982, 1985) and Benson & DeKeyser (2018). Therefore, more qualitative research, specifically case studies that review the contextual and individual factors from a SCT lens are needed.

The secondary studies such as Lui and Brown’s (2015) methodological synthesis, Hyland and Hyland’s (2006) narrative review, and Kang and Han’s (2015) meta-analysis on WCF demonstrates the need for more attention on K-12 learners with regards to WCF research. More research on the types of WCF, scope of feedback, and their effects in needed to gain a better understanding of the roles these factors have on WCF.

Storch (2018) also calls for the study of tools and its impact on the provision of feedback and on the learners’ processing of the feedback. Using the Computer Mediated Communication example, track changes and marginal comments using word processing programs may shed light on an effect on the quantity and the nature of the feedback the teacher provides and also how learners engage, process and appropriate the feedback. Especially now, more than ever, the impact of COVID-19 pandemic on the educational landscape has changed the way teachers and students interact, positioning students and teachers alike to utilize more technological tools for telecommunication during distance and blended instructional environments. An understanding on how WCF is rendered within a K-12 setting in the U.S., the nature of WCF employ by ENL teachers, the digital tools that are used, and the effect it has on English Language Learner L2 student development through a case study qualitative approach is the focus of this study.
CHAPTER 3
Method

Research Questions

The research questions below have been formulated in taking a qualitative approach to the study of Written Corrective Feedback (WCF) and English Language Learner (ELL) second language (L2) writing development within a secondary educational setting. These research questions have been adapted from Storch (2018); however, this study considered the impact of COVID-19 school closures that began during the Spring 2020 and the hybrid and remote learning instructional contexts during the Fall 2020. Now more than ever, an understanding of how individual and contextual factors that impact L2 writing development for English Language Learners is needed within this rupture in the trajectory of education worldwide. The questions include:

1. What is the impact of new mediating tools (i.e. technology) on the provision of and response to WCF during the COVID-19 school re-entry during the Fall 2020 semester within high school ENL courses?

2. What individual and contextual factors shape ENL teachers’ feedback practices?

3. What individual and contextual factors shape ELLs’ responses to the feedback provided?

4. What is the nature of WCF provided to ELLs on their writing during the pandemic?

5. What effect does the WCF rendered have on the ELLs’ L2 writing development?

The first question is the central research question, one that reflects a broad question that asks for an exploration of the central phenomenon (Creswell and Creswell, 2018), such as WCF during COVID-19 pandemic. Questions 2 through 5 represent subquestions, which relates to the general central question but narrows the focus of the study. Creswell and Creswell (2018) recommends no more than one or two central
research questions and no more than five to seven subquestions in addition to the central question.

**Research Design and Data Analysis**

**Fall 2020 Re-Entry Instructional Contexts.** Based on the progress of COVID-19, guidelines from the Center of Disease Control and Prevention (CDC) and executive order of Governor Cuomo, the research procedures developed are in alignment with New York State guidelines for hybrid and remote learning as well as part of the school’s re-entry plan where data were collected. The data collection for this study was based on the restrictive social distancing mandates which positioned schools to create staggered student schedules in order to reduce the class size population and engage students in a percentage of instruction in person and a percentage of instruction via remote learning using a digital platform. This form of blended learning consisted of in person classes and classes that used telecommunication software or other online Learning Management Systems (LMS). In addition, many of the students and families opted for full remote instruction, using the LMS completely for instruction and the completion of instructional tasks. Because Written Corrective Feedback is predominately rendered by teachers using their handwriting, the COVID-19 had positioned teachers to completely utilize the LMS for student writing tasks and used digital tools in providing feedback to their students for the safety and well-being of students and the teachers alike. Regardless of the instructional scenario, instruction occurred on the LMS platform so that teachers can teach simultaneously to on-site and remote students. Having on-site students engage with the LMS was also a preemptive measure as the instructional setting may change at any
given minute due to the progress of COVID-19, where hybrid learning had to quickly
switch to complete remote instruction.

Research Site

The study site chosen is one of the “Big 5” urban school districts in New York
State. This represents a convenience sampling as I serve as a district level administrator
within the school district. This district serves appropriately 27,000 Prek-12 students,
which about 13% are English Language Learners. There are 40 schools in total within
the district, including 32 elementary schools and 8 high schools. One of the eight high
schools (grades 9-12) was selected for the study. Within the selected high school, one
English as a New Language (ENL) classroom was selected where instruction is given
solely to ELLs as part of the mandated New York State services for ELLs (standalone
ENL services).

Paradigm

This study took a qualitative method approach, specifically a case study. The
study reports on events that actually happened to an ENL teacher and a group of students
in a single unit, or what Creswell (2007) describes as a “bounded system.” A bounded
system is what is studied along with the products of the research within the case study.
The bounded systems can also be viewed as the Bronfenbrenner’s (1979, 1993)
Bioecological Model as depicted in figure 1.3. The bounded system in this study
included the data collected from the participants, as well as the data, themes that emerge,
and my interactions and interpretations as the researcher that emerged into a case.
Therefore, the study is inductive in nature.
For these reasons, this study adopted a constructivist paradigm to understand and interpret social interactions as it relates to learning, specifically Sociocultural Theory and from an ecological perspective. The ontological assumption taken is that there are multiple realities, including the reality that is constructed by the observer (Lichtman, 2013). This includes the reality as experienced by each of the participants as well as the interpretation made by me, the observer. Therefore, I approached the study knowing that the knowledge uncovered is contextual and must be respectful of the varying viewpoints and the subjective truths that emerged from the interactions with the multiple participants. My epistemological stance is that the role of researcher is central to the study. It is expected that the interpretations are based on the researcher’s experience and background (Lichtman, 2013). Thus, it is imperative that I established an ethical, respectful, and trusting rapport between the participants (teacher and ELLs) and myself throughout the study.

**Research Design**

Because this study investigates the problems of practice within a bounded environment, a case study approach was utilized. This approach is essential for research in taking an ecological approach, as it assisted to understand students’ experiences as lived in their context (van Lier, 2003). The case study included three English Language Learner students and a high school English as a New Language (ENL) teacher in order to understand the participants’ experiences as lived in their contexts during the COVID-19 Fall 2020 semester. The focus was on in-person and remote instructional practices within an urban public school in New York as it relates to Written Corrective Feedback on L2 writing development. Data were collected over a 15-week period in the Fall 2020
semester from multiple sources, including students’ drafts with written feedback, semi-
structured interviews, retrospective verbal reports, classroom observations, and class
artifacts. These data were compiled to form individual case profiles.

Data Collection

**L2 student writing.** The data were collected digitally in order to protect the
safety and well-being of the participants and the researcher. Additionally, all writing
tasks and instructional materials were created and rendered digitally for the same reason.
The ELL student writing with their teachers' feedback was collected digitally using the
school district’s LMS. Data analysis of students' written texts and revisions yielded
findings about how learners responded to the feedback received with digital WCF. This
was utilized to investigate the characteristic of the digital WCF rendered, including the
nature of WCF provided to learners to their writing during the pandemic, the extent to
which the feedback provided is responsive to the learner's evolving linguistic needs and
expertise, the impact of the modality (digital), and to determine if there is evidence of L2
development in response to the WCF provided. The impact that different modalities
(digital versus handwritten) have on WCF was explored by analyzing participants beliefs
and perspectives during the interviews and retrospective verbal reports. The L2 student
writing collection includes a diagnostic writing sample, one writing task with the teachers
WCF (WT), and one revision task based on the WCF received (RT).

**Teacher and ELL student interviews.** For the health, protection and security of
the participants and myself, all interviews and retrospective verbal reports were held
using the telecommunication platform provided by the school district, which was Zoom,
and were recorded so that verbatim transcriptions were created for analysis. The Zoom
application provided automated transcription for each interview. I updated and revised the transcription through the reviewing of the video recording to ensure accuracy. The semi-structured interviews were conducted at the beginning and at the end of the 15-week study using a developed interview guide. Participants decided in which language each interview was conducted. The interviews elicited the learners' and teacher's goals, including the importance they attributed to grammatical accuracy, their beliefs about how to improve their writing, and the factors that may have shaped their beliefs. The analysis of the feedback the teacher provided on L2 student writing provided an important means to triangulate the interview data. This was used to determine if teacher perceptions and beliefs match their feedback practices. The interviews also shed light about the relationship learners established with the teacher.

**Retrospective verbal reports.** The retrospective verbal reports were held immediately after each student participant finished revising the writing task (WT). Participants were given explicit instructions at the beginning of each reporting session. The students' drafts with teacher feedback as well as their revision were used as prompts with the student participants. For the teacher retrospective verbal report, only the student participants’ WT with the WCF were utilized for prompting. These data provided insights to what the students and teacher may have been thinking at the moment when WCF was provided and engaged with. Just like the interviews, this procedure was completed using the telecommunication application, Zoom, for the participants’ safety as well as my own. The sessions were recorded and transcribed using the same application, and updates to the transcript were completed by me to ensure accuracy of the transcription.
**Classroom observations.** Interview data was supplemented with classroom observation data. The researcher conducted classroom observations both on-site during class sessions as well as remotely using the school’s LMS, Microsoft Teams. During on-site classroom observations, I followed the social distancing protocol of staying six feet away from the participants, wearing a face mask at all times, and engaged in sanitizing practices in order to protect the participants. The practice of visiting schools in-person was not a practice unique to this study since I visited schools in-person as part of my school district responsibilities. During remote observations, I observed classroom interactions by being logged on the class telecommunication platform. The analysis of in-person and remote classroom observation data assisted to establish the types of information communicated to the students about what is important in L2 writing as well as the kinds of relationships the teacher builds with her students during both in-person and via remote learning. These data were also utilized to triangulate the data captured during the interview collection and analysis.

**Data Analysis**

Data analysis involved the analysis of student written texts to investigate the characteristics of WCF based on the typology of Ellis (2009) that was reviewed in the Literature Review, Chapter 2. The quality of students’ revisions was also analyzed to determine the efficacy of the WCF provided. The quality was determined by the grammatical accuracy of the students' revision based on the feedback provided. Text analysis included adapted coding schemes for writing errors from Hyland (2003). Student errors in writing were coded and distinguish between grammatical errors and writing convention errors (spelling, capitalization, punctuation). Each WCF intervention
was cross linked to the students’ revision in the revision draft. These revisions will be
categorized through the coding scheme in Han (2019), which included correct revisions,
incorrect revisions, deletions, substitutions, and no revision. Unlike Han (2019) and
Hyland (2003), WCF points were not tabulated for the frequency of WCF as it was
considered misleading as to the amount of intervention completed by the teacher. Based
on the different WCF types utilized, the level of explicitness of WCF was considered and
reported to account for the magnitude of the intervention. The explicit and implicit
spectrum of WCF is also discussed in Chapter 2. In addition, the data collected from
interview, verbal reports, field notes from classroom observations, and class documents
were analyzed. The multitude of data sources for the case study facilitates a holistic
understanding of the phenomenon being studied (Baxter & Jack, 2008).

Interviews and verbal reports were recorded using telecommunication platforms
and then transcribed verbatim. Drafts with the written feedback, transcripts and field
notes and documents related to each student were compiled into an individual case
profile. There will be two cycles of coding. The first cycle of coding involved reading
case profiles repeatedly and labeling data chunks that informed learner responses to the
WCF. This cycle provided for pattern matching, explanation building, categorical
aggregation, intracase analysis and direct interpretation (Yin, 2013; Stake, 1995). The
second cycle of the involved cross-case comparisons of the three students and teacher to
identify common patterns regarding the relationship between learner factors and
contextual factors in mediating learner responses with WCF, including the impact of
scaffolding and the incorporation of technological tools to deliver feedback. Tables 3.1
and 3.2 provide the coding scheme that emerged from the two cycles of coding.
Table 3.1

Individual factors influencing learners’ interaction with WCF

<table>
<thead>
<tr>
<th>Categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language abilities</td>
<td>(a) Proficiency level in English Based on the 2019 NYSITELL, Lissy had an emerging proficiency. Based on documentation, Lissy arrived 1.3 years ago. As per NYSED, ELLs who have 0-3 years in the U.S. are Newcomers</td>
</tr>
<tr>
<td></td>
<td>(b) Years in the U.S.</td>
</tr>
<tr>
<td></td>
<td>(c) ELL Category</td>
</tr>
<tr>
<td></td>
<td>(d) The students’ L2 grammatical writing errors Lissy’s WT contained sentence fragments with missing verbs.</td>
</tr>
<tr>
<td>Learner beliefs</td>
<td>(a) The students’ views, opinions, and conceptualizations about the persons involved in the learning task (self and teacher) Babu stated that he has known Ms. Vails since last year and likes her because of all the help he gives her.</td>
</tr>
<tr>
<td></td>
<td>(b) The students’ views, opinions, and conceptualizations about the learning task itself (learning English, learning English writing, English grammar, dealing with WCF) Nyima stated she loves writing in English and aspires to become a writer as writing really allows her to express herself. Babu stated “without grammar there is no English.”</td>
</tr>
<tr>
<td>Teacher beliefs</td>
<td>(a) Teachers’ views, opinions, and conceptualizations about the persons involved in the learning task (self and students) Ms. Vails stated that Babu is fluent when speaking but it doesn’t always translate into his writing.</td>
</tr>
<tr>
<td></td>
<td>(b) The teachers’ views, opinions, and conceptualizations about the learning task itself (learning and teaching English, English writing, English grammar, and rendering WCF) Ms. Vails believes grammar instruction is important and finds value in providing WCF. However, she believes that students rarely look at it.</td>
</tr>
</tbody>
</table>
Table 3.2
Contextual factors influencing learners’ interaction with WCF

<table>
<thead>
<tr>
<th>Categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>First order affordance</td>
<td>(a) Textual factors-the characteristics of WCF (e.g. quantity, explicitness, location on student writing)</td>
</tr>
<tr>
<td></td>
<td>Ms. Vails provided Lissy with reformation WCF, the most explicit type of WCF.</td>
</tr>
<tr>
<td></td>
<td>(b) Instructional level factors (teacher’s instruction, materials, student access to resources, curricular goals, setting-hybrid, remote or on-site learning)</td>
</tr>
<tr>
<td></td>
<td>Ms. Vails took Nyima WT which was a photo of her handwritten assignment and took photo clips of the targeted sentences identified with the WCF below in.</td>
</tr>
<tr>
<td>Second order affordance</td>
<td>(a) Interpersonal level factor (e.g. relationships between the teacher and the student)</td>
</tr>
<tr>
<td></td>
<td>All three participants stated Ms. Vails was engaging through her use of Bitmojis and PowerPoints containing visuals and videos.</td>
</tr>
<tr>
<td></td>
<td>(b) Interactional level factor (e.g. interactions between the teacher and student regarding WCF and grammatical errors, and the interaction between the student and the WCF during revision)</td>
</tr>
<tr>
<td></td>
<td>The teacher made it optional for students to complete the revision of the WT with her WCF for extra points in raising their grades.</td>
</tr>
<tr>
<td>COVID-19 Pandemic Factors</td>
<td>(a) Instructional context (e.g. Hybrid or 100% Remote)</td>
</tr>
<tr>
<td></td>
<td>Nyima received hybrid instruction while Lissy and Babu were completely remote with their video cameras off.</td>
</tr>
<tr>
<td></td>
<td>(b) COVID-19 related events (e.g. infection, deaths, etc.)</td>
</tr>
<tr>
<td></td>
<td>School closures prompted hybrid students to switch into complete remote settings.</td>
</tr>
</tbody>
</table>
Triangulation was conducted in order to maximize the trustworthiness of the data analysis through identifying and cross-referencing evidence collected from the different sources discussed above in support of each theme that emerged. The second cycle of analysis and triangulation provided for intercase analysis, synthesis across cases, categorical aggregation, explanation building, pattern matching, as well as direct interpretation (Yin, 2013).

**Presentation of Findings**

The results of the case study were reported in Chapter 4 of this study and will be presented to administrators at the school and district level. The results include the presentation of findings using tables and charts based on the labeling of data chunks informed by learners’ response to WCF. It also reflects the cross-case comparisons of the three students to reflect the common patterns regarding the relationships between learner factors and contextual factors. Potential relationships included alignments and misalignments between and across factors.

Factor classification and categories were adapted from Han (2019), which included individual factors such as language abilities, learner beliefs and teacher beliefs. Contextual factors classification and categories were also adapted from Han (2019) and included first order affordances (e.g. textual level factors, and instructional level factors) and second order affordances (e.g. interactional and interpersonal factors). The study concludes with a summarization of the findings, as well as conclusions and implications that were drawn from it.
Participants

The participants in this study includes Ms. Vails, a high school English as a New Language or ENL Teacher (formerly known as English as a Second Language or ESL teacher) who teaches a "stand-alone" ENL class of English Language Learners (ELLs). This class is part of New York State's mandated services for ELLs who have entering and emerging proficiencies, and optional for those with transitioning proficiencies. In addition, three high school ELL students who attended the standalone ENL class participated which allowed for me to engage in cross-case comparisons. The ELL student participants, Lissy, Babu and Nyima, reflect two different home languages, Malayalam and Mandingo. The ENL teacher only is able to communicate fluently in English. The three student participants are in the 9th and 10th grade of high school and are Newcomer ELLs, meaning they have recently migrated to the U.S. within the past three years or less. Table 3.3 provides the summary of the biographical data for the student participants. The participants in this study were provided aliases for the protection and respect of their identity and for anonymity.

Table 3.3

Summary of the student participants biographical data

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>Grade</th>
<th>Age</th>
<th>Country of Birth</th>
<th>Home Language</th>
<th>Years in the U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>10</td>
<td>14</td>
<td>India</td>
<td>Malayalam</td>
<td>1.3</td>
</tr>
<tr>
<td>Babu</td>
<td>9</td>
<td>13</td>
<td>India</td>
<td>Malayalam</td>
<td>1.1</td>
</tr>
<tr>
<td>Nyima</td>
<td>9</td>
<td>14</td>
<td>U.S. but moved to</td>
<td>Mandingo</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the Ivory Coast</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>when she was a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>baby</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Participant Recruitment.** The first step taken in my recruitment efforts was sending an email to all K-12 English as a New Language (ENL) Teachers within the district in the first week of September. An email script is included in Appendix A. Two ENL teachers, both from the high school level, responded expressing their interest in participating in the study, including Ms. Vails. The participating teachers provided me with the teacher consent form (Appendix B) which contained further details and contact information of the mentor faculty member overseeing the study. Once the two teachers provided the consent form back and a copy was provided back, a brief oral recruitment presentation was given to the teachers' students (Appendix C).

From Ms. Vails’ class, three students expressed interest, Lissy, Babu and Nyima. From the other ENL teacher’s class, one student expressed interest. Interested students were provided with the parent consent and the student assent forms which review the details of their participation (Appendix D and Appendix E). A pre-research interview was held with interested students to assist in narrowing the pools based on their willingness and ability to participate throughout the 15 weeks. Questions included if the student will be going away on a trip or vacation during the 15 weeks, and how committed is the student to remain in the study from September through December during the 15 weeks. Once participating students' parental and student consent forms were signed digitally and submitted electronically, copies rendered to the participants, and based on delimitations reviewed in Chapter 1 were verified, the data collection was initiated with the collection of the student diagnostic writing in early September, Week 1 of the study. Ultimately, the goal was to have at least two students selected to develop a case study and one ENL teacher as completed in Han (2019). During the course of the study, the student
from the second ENL teacher left the study midway. The data analyzed and collected are only from Ms. Vails’ classroom, which includes one ENL teacher and three ELL students.

**Participant Privacy and Data Confidentiality.** Because this is a qualitative study that incorporates a case study approach, personal identifying indicators surfaced during the data collection and analysis. I filed the data with the aliases and codes for the cases developed for each participant. Digital files for the recorded interviews, files of the writing, classroom artifacts and the transcriptions were saved on an external drive (USB) that was kept in a locked place that only I had access to. None of the aforementioned files was stored on my personal or business computer. Any recordings on applications were downloaded unto the USB and deleted from the computer applications.

Data were collected through student written samples with their teachers' WCF on it. This data had identifying indicators such as the students' name and student ID numbers that were redacted and was given a code number to ensure that the data was compiled with other data from the participants in developing a case study file. Participant interviews were video recorded and transcribed verbatim. The recorded interviews and the retrospective verbal reports were conducted via Zoom. The transcriptions had the code names for the participants to protect their anonymity. The teacher's information was also be changed to protect her identity. No reference to the school's name or address was included to further protect the identities of the participants. The redacted data for each participant will be compiled into separate case files store on the researcher's USB for analysis that was stored with lock and key. Only I had access to these files.
Participant reciprocity and power dynamics. By participating in this study, participants engaged in systematic reflection on the writing task, the WCF rendered, and the revision task. This is further elaborated in Chapter 4. In addition to the reciprocity, it is important to acknowledge that teacher and students may have felt obligated to say or act in a certain way because the researcher is an administrator for the Board of Education. This can affect the authenticity of the data and act as a potential research bias. In order to mitigate the effects of participant discomfort, I reassured the teacher and students that they do not have to respond to any questions they do not want to answer and that their perspective in vital to this project as the way they see it. When I noticed discomfort of the participants during the interview or retrospective reports, I asked either "Would you like me to skip this question" in order to prevent any harmful effects or reactions that could occur during the study.

Instruments

Writing Documents

As reflected in the data collection section of this chapter, data collection from a variety of sources is due to the nature of qualitative research. Student writing with their teacher’s WCF were collected through a writing activity instrument aligned to the district’s instructional unit created for the Fall 2020, specifically for hybrid and remote contexts. District high school ENL teachers and ELLs were given a unit entitled “Pandemics across time and space.” This unit was developed in collaboration with the Quality Teaching for English Learners (QTEL) and the NYU Steinhardt- Language Regional Bilingual Education Resource Network (Language RBERN) to utilized during the re-entry of students in the Fall 2020 across scenarios (in-person, remote learning and
blended learning). This unit was created in response to the need to continue to support students during these unprecedented and challenging times, especially for our students who are Multilingual Learners (MLLs)/English Language Learners (ELLs), and that is responsive and relevant to students experiences and knowledge obtained during the pandemic. The school district provided professional development to the high school ENL teachers during June 2020 in using these materials for the Fall 2020 implementation.

Each of the lessons within the unit are aligned with New York State Learning Standards for English Language Arts, and incorporated a variety of genres and multimodal texts to engage students in critical thinking. In each lesson within the student, the unit designers state that students will read, think, synthesize and respond to various text types and prompts; Experience activities that weave conceptual, analytic, and language practices; and engage in reflection; and have opportunities for further inquiry. Appendix F contains the writing task that will be collected and be given WCF for this unit. This writing instrument (referred to as the Written Task or WT) will elicit student writing that will be collected for the case study. The subsequent revision (referred to as the revision task or RT) will also be collected to determine the interaction between WCF and student response. Note that the writing task utilize was not unique for this study for all ENL teachers utilized this as part of their instruction.

It is expected that students will be using everything they learned in the prior instructional activities within the unit and thinking about how that information is similar or different to what they are hearing and experiencing about the novel coronavirus (COVID-19). WT is a letter writing activity where students are to imagine that they are
living in a city or town in Europe during the Black Death. Students are to use at least two of the primary sources covered during class and write a letter to a friend or family member telling them what the student is seeing and warning them about the new disease. In their letter, the student must include in their writing the following: at least two symptoms of the disease, how long people can live once they become sick; and a description of what happens to people who have the disease. Comparisons across writing tasks with the teacher’s WCF and the revision tasks provided insights to the nature of WCF employed and the student response to WCF.

*Retrospective Verbal Report Instructions*

In addition to writing tasks (WT and RT), students and the teacher engaged in retrospective verbal reports to provide insights on what the participants were thinking when they rendered, perceived and revised the writing error and the WCF. Learner and teacher retrospective verbal reports instructions were adapted from Han (2019). “Instructions for the Learners’ Retrospective Verbal Report” (Appendix G) was utilized to engage the ELL students in metacognitive thinking and reflection on what they understand the WCF to be as well as the saliency of the WCF. A similar set of instructions for the “Teacher’s Retrospective Verbal Report” (Appendix H) was created to engage the teacher in a similar metacognitive process to reflect on what errors did she perceived that required correction, the type of WCF utilized, and the goal or intended result of the WCF rendered. After the revision task (RT), both the teacher and the three students engaged in the retrospective verbal reports, for a total of six reports.
**Interview Guide**

The most common way to collect qualitative data is through interviews, where we can use predefined questions and conduct either a structured, semi-structured, or unstructured interview (Kvale, 2007). The purpose of conducting an interview is the same, regardless if you use a structured or an unstructured style, as the research is gathering information from the participant about the topic that is being studied (Lichtman, 2013). This study incorporated a semi-structured interviews for both the teacher and student participants. Semi-structured or guided interview is a type of interview that involves the development of a general set of questions and format that the research will follow and use with all participants; however, the interviewer can vary the questions as the situation demands (Lichtman, 2013).

An interview guide (Appendix I) for the semi-structured interviews for the ELL students and teachers was adapted from Han (2019) to also include contextual factors such as COVID-19 and the abrupt use of technological tools for remote learning. There were two rounds of interviews for both teacher and student participants. The interview guide contains the first student and teacher interview questions to serve as guidance to the interviewer, as well as a last round of interviews for the student and teacher interviews. Further information of when these interviews will be rendered will be discussed in the subsequent section in the research procedures.

**The Research Procedures**

This study took a case-study approach to understand students’ lived experiences with regards to WCF during the COVID-19 pandemic school re-entry during the Fall 2020. Data were collected over a 15-week period from multiple sources described above,
including: students’ drafts with written feedback, student revisions, semi-structured interviews, retrospective verbal reports, classroom observations and class documents. The interviews were conducted at the beginning and as the end of the study with each participant being given the option to respond in the language they prefer. Only Lissy spoke in her home language, which was Malayalam. Translation application were utilized with Lissy that translated the researcher’s questioning to Malayalam and Lissy’s responses in English. A native speaker of Malayalam was employed to review the quality of the automated translations for accuracy.

The retrospective reports were completed immediately after each student finished revising WT. The teacher and students given explicit guidance using the Retrospective Verbal Report Instructions, as well as the students’ drafts with teacher feedback, as well as their revisions, as prompts. Field notes was taken during classroom observations with a focus on interactions between teachers and students, student to student interactions, teacher instruction about L2 writing, and the student participants’ in-class performance. Lastly, related classroom artifacts were collected, such as writing prompts, teaching PowerPoint slides, etc.

The study began the data collection during the start of the academic year in September 2020. Once the communications to the district’s ENL teachers was sent, and the teacher and student participants were recruited, and the consent and assent were given by the teacher, students and their parents, the data collection commenced. The sufficient number of participants include 1 ENL teacher and 2 ELL students as this was the number of participants in Han (2019) that also incorporated a case study approach to the study of WCF using an ecological perspective to explore student engagement within the college
Table 3.4

Timeline of the data collection

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Data collection procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Diagnostic writing collected</td>
</tr>
<tr>
<td>Weeks 2-3</td>
<td>The first interviews</td>
</tr>
<tr>
<td>Weeks 4-7</td>
<td>WT is assigned, collected, returned with teacher feedback</td>
</tr>
<tr>
<td>Weeks 8-10</td>
<td>Students complete RT and submit to teacher</td>
</tr>
<tr>
<td>Weeks 11-13</td>
<td>Retrospective verbal reports of participants</td>
</tr>
<tr>
<td>Weeks 14-15</td>
<td>The last interviews</td>
</tr>
<tr>
<td>Throughout the semester</td>
<td>Classroom observations</td>
</tr>
<tr>
<td></td>
<td>Collection of class artifacts</td>
</tr>
</tbody>
</table>

level context in China. This study included 1 ENL teacher and 3 ELL students within the K-12 context in the U.S. The recruitment process occurred during the first two weeks in September (September 1-11). Table 3.4 reflects the data collection timeline for this study. The timeline begins with week 1, which began on September 14. The last week of the study, week 15, which was from December 21-23.

Limitations and Ethnical Considerations

Because this study utilized a case study design, it has been argued that the results are specific to the individual case; however, case studies such as this study is valuable since a scientific discipline without a large number of thoroughly executed case studies is a discipline without systematic production of exemplars, and a discipline without exemplars is an ineffective one (Flyvbjerg, 2006). Nonetheless, given the small number of cases in this proposed study (3 ELLs) and the exploratory, hyper proximity nature of the case study research, researchers and practitioners should be cautious about the pedagogical implications from the findings.
Another limitation is during the course of the study, the high school shifted completely remote limiting the amount of data that can be capture within a hybrid scenario which may have affected the data as one participant, Nyima elected for hybrid instruction. However, the data is representative of the many unknowns as school closures can and did happen at any moment throughout the Fall 2020 semester. Nevertheless, the above sections reflect all the precautionary steps to maintain the health and well-being of the participants as well as honoring their respect and dignity.

**Summary**

This investigation sought to develop a coherent understanding from an ecological perspective of L2 writing development and the impact the COVID-19 pandemic has on the interactions between students and their teachers. Students, families and schools are experiencing unprecedented times and are navigating uncharted territory together in how we educate our students. This case study was designed to ascertain the interactions between contextual and individual factors that shape ENL teachers’ WCF to their ELL students’ morphosyntactic errors and the ELL students’ response to the feedback provided.

Particular attention was given to the mediating tools (i.e. technology) that have been employed with the WCF, as well as other contextual issues that are related to the COVID-19 pandemic. Data collection occurred during a 15-week timeline within a secondary school’s ENL classroom from an ENL teacher and three Newcomer ELL students during the Fall 2020 semester. ELL student writing samples with the teacher’s WCF, revisions, interviews with the ELL students and teacher, direct observations, and retrospective verbal reports were collected to form participant files or cases. Information
from all sources were analyzed and presented as the interaction or relationships between individual and contextual factors surrounding WCF. The results are discussed in the subsequent chapter, Chapter 4-Analysis of findings.
CHAPTER 4
Analysis of Findings

The central research question that guided the data collection and analysis was “What is the impact of new mediating tools (i.e. technology) on the provision of and response to Written Corrective Feedback (WCF) during the COVID-19 school re-entry during the Fall 2020 semester within high school English as a New Language (ENL) courses?” This question surfaced as a result of multiple factors. This includes the tremendous concern of learning loss during the abrupt K-12 school closures during the Spring 2020 due to the novel coronavirus pandemic worldwide. It was reported that the U.S. education system was not built to deal with extended shutdowns like those imposed by the COVID-19, and although teachers, administrators and parents have worked tirelessly to keep learning ongoing for students, these efforts are not likely to provide the quality of education that is delivered in the classroom which will have implications that will last a lifetime (Dorn et al, 2020). This includes research studies that have shown students falling months behind during the pandemic disruption (Goldstein, 2020, June 5), projections of up to $8.5 billions in annual income loss associated with interruptions and learning deficits as a result of hybrid and remote learning (Brundage & Ramos-Callan, 2020), and the exacerbation of the inequity already persistent in the U.S. education system (Dorn et al, 2020). While the educational disruptions have threatened learning loss for nearly all students across the U.S., the impromptu shift to complete remote and online learning has been especially severe for students from immigrant homes where English is rarely if ever spoken (Kim, 2020).

The central question above focuses on the impact of new mediating technology on the provisions of and response to WCF during such unprecedented times. It stems from
my desire to build equity and access to English Language Learners (ELLs) in their English language development amidst a worldwide crisis through a key construct in second language development, feedback. Specifically, ensuring how ELLs, and to what extent, are receiving instruction for targeted English instruction through the use of feedback in building morphosyntactic accuracy in their English writing during remote and hybrid learning. The use of WCF with digital tools presents an opportunity, as well as a challenge, for the continuity of learning for ELLs during hybrid and remote learning. Nevertheless, the purpose of WCF, regardless if it is rendered digitally or in-person, is to promote student awareness of grammatical structures, motivate students to engage in grammatical understanding, and increase the morphosyntactic accuracy in their L2 academic writing development. Digital WCF represents how learners and teachers can interact remotely and co-construct knowledge and understanding in L2 writing via remote learning.

This disruption also poses an opportunity for research in exploring further this unchartered territory. Language teachers spend much of their time providing WCF on L2 students’ writing in hopes of helping them improve grammatically accuracy; however, they are not waiting for concrete empirical support to render it and instead provide WCF based on intuition, experience, and student expectations (Brown, 2020; Ferris, 2011; Hyland & Hyland, 2006). Even more so now, it is important to capture what K-12 ENL teachers are actually employing, how and why when they engage in WCF during hybrid and remote learning. As a result, subquestions 2-5 were incorporated that relate to the general central question above but narrows the focus of the study. They included:

2. What individual and contextual factors shape ENL teachers’ feedback practices?
3. What individual and contextual factors shape ELLs’ responses to feedback provided?
4. What is the nature of WCF provided to ELL on their writing during the pandemic?
5. What effect does the WCF rendered have on the ELLs’ L2 writing development?

The central question and subquestions are formulated with the constructivist assumption that language learning is a social process, where knowledge is co-constructed between the learner and the more knowledgeable interlocutor. Sociocultural Theory (SCT) provides the lens utilized during the data collection, analysis and articulation of the findings that address the central and subquestions above. Notably, the theory posits that learning, especially language learning, requires social interaction between individuals (Vygotksy, 1978). Unlike Cognitive Theories where learning is viewed as occurring entirely in the learner’s brain, SCT brings the cognitive and the social into contact through the notion of mediation (Lantolf, 1994).

SCT views language learning as dialogically based where acquisition occurs in and not as a result of interaction (Guo, 2018). This is reflected in the metaphor and key SCT construct of the Zone of Proximal Development (ZPD). Through social interaction, learners move within their ZPD their actual developmental level to their potential development level through a series of scaffolds utilized during interaction. These scaffolds range from other regulatory, which is provided by the more knowledgeable other through collaborative intermental activity, towards self-regulation or autonomous intramental activity (Lantolf and Thorn, 2007). The series of scaffolds during interaction between the other-regulatory to self-regulatory developmental stages reflect a range of explicitness. As reflect in Aljaafreh and Lantoff (1994) regulatory scale, scaffolds closer
to other-regulatory are the most explicit, while scaffolds farthest away from other-regulatory and closer to self-regulatory are more implicit. The explicitness refers to how the WCF draws learners’ attention to the location or nature of an error (Brown, 2020). For example, indirect WCF provides the location of an error for students to self-correct (self-regulation) and is found to promote deeper cognitive engagement (Bitchener, 2008), while direct WCF provides the location and the correct form (other-regulation) for the student in learning the linguistic feature.

With this understanding WCF feedback can be understood as a dialogic interaction between the learner and the teacher during writing, where the teacher provides scaffolds that have a range of explicitness based on the type WCF utilized and based on the developmental level of the student. Within SCT, the changes in explicitness within WCF rendered and the ELL student’s increasing ability to self-correct and to generalize the knowledge gained to new written texts is evidence of language development (Storch, 2018). Therefore, student errors are a natural component in language development, as it contributes to the information the teacher utilizes in deciding which WCF to use as well as reflects where students are within their ZPD. With this understanding, the priority of WCF is not viewed as the eradication of morphosyntactic errors, but rather, it should remind students that errors are natural and necessary within language learning.

In addition to grammatical errors, it has been noted that the WCF provided is based on individual and contextual factors. The ecological perspective of SCT assist in understanding the language learner as immersed in an environment full of potential meanings and are realized gradually as the learner acts and interacts within and with the environment (van Lier, 2000). This understanding accounts for the individual factors
within a learner as nested within an environment of contextual factors known as affordances. The concept of affordance from an ecological perspective, is a particular property of the environment that is perceived and acted upon by the learner in that environment (Gibson, 1979). These affordances are both physical (first order affordances) and relational (second order affordances). For example, scaffolds (e.g. WCF) provided by the teacher is a first order affordance. The learner receiving guidance to perceive the WCF and the motivation to act upon the WCF by revising their written draft is a second order affordance. Therefore, it is important to know that although first order affordances are provided to a learner, unless the relationship between the learner and the affordance is cultivated, it will not have the intended effect in the learning process.

Based on the ecological perspective in SCT, each individual learner is understood as possessing a variance of factors they bring to the environment they are immersed in. The environment provides various affordances that, depending on the relationship with the affordance, will be or not be perceived and acted upon. Therefore, the study of affordances, other contextual factors such as COVID-19 factors, and the individual factors will provide the big picture of the impact of digital tools on the provision of WCF. Because of the variance in individual and contextual factors, a case study approach was employed for an in-depth analysis of ELLs and the ENL teacher who were engaged in WCF in L2 writing development during hybrid and remote learning during the Fall 2020.

The study site took place in one of the “Big 5” urban school districts in New York State where I currently serve as the district administrator who oversees Multilingual Learner and World Language programs, where 13%-14% of the student population are
English Language Learners. The research site is one high school within one ENL class. The case study approach is essential for this research in taking an ecological approach as it sought to investigate an instructional practice (e.g. WCF) within a bounded environment (e.g. one ENL class within a high school), and explores students’ experiences as lived in their context (van Lier, 2003). In this case, during the COVID-19 Fall 2020 re-entry to school. The case study includes one ENL teacher and three ELL students. The sufficient number of participants for this case study was surpassed as the case study of WCF as described in Han (2019) included one teacher and two students.

Table 4.1 provides a glimpse of the demographic and individual factors of the student participants for the case study. The participant profiles in this chapter provide an in-depth overview for each participant.

Data were collected from multiple sources for fifteen weeks from September through December 2020. The data included L2 student writing samples with their teacher’s WCF, student revisions, teacher and ELL student interviews, teacher and ELL student retrospective verbal reports, classroom observations, and classroom materials collected. The interviews and retrospective verbal reports were held via telecommunication software for health and safety reasons due to the pandemic and were transcribed verbatim. The student drafts with WCF, transcripts, field notes and documents related for each participant were compiled into four individual cases.

There were two cycles of coding, one involved reading cases profiles repeatedly and labeling data chunks that inform learner response to WCF. This cycle provided for the emergence of pattern matching, explanation building, categorical aggregation and intracase analysis and direct interpretation (Yin, 2013; Stake, 1995). The second cycle
of coding involved the cross-case comparisons of the three students and ENL teacher to identify common patterns regarding the relationship between learner factors and contextual factors in mediating learning responses to WCF. During this second round of coding, triangulation was conducted in order to maximize the trustworthiness of the data analysis through identifying and cross-referencing evidence collected form the different sources in support of each theme that emerged. The themes include: Individual factors affecting learner’s interaction with WCF, ecosystemic properties of WCF, symbiosis of the learner and WCF, adaptations of WCF practices and perspectives during an ecological disaster. They are discussed in this chapter following the participant profiles.

**Participant Profiles**

*Lissy*

In September 2020, Lissy was a shy but dedicated 10th grade student. Her ENL teacher, Ms. Vails, described Lissy as very hardworking and responsible because she submits all her assignments on time (retrospective verbal report). As a Newcomer ELL, Lissy just started formally learning English a year ago when she arrived to the U.S. from India in 2019 (first interview). She stated that she only knows two languages, her native language, Malayalam, and is learning English (first interview). She believed that English is important not only for her in obtaining a good job in the U.S., but also, “English is important in every country” (first interview). In her writing diagnostic she discussed that her dream is to graduate high school and become a nurse. She likes South Indian food, likes sports-particularly cricket, likes Indian music and she misses her friends back home in India. She prefers online learning due to COVID-19, but stated she would rather go back to school than participate in online learning in order to go see her
friends once it is all over (first interview); “Before by going to school I was talking with my friends and answering the teacher’s questions. Now I have internet problems” (first interview). Although COVID-19 has not directly affected her or her family, Lissy stated that the pandemic has her very worried. In fact, the entire school district was fully remote during the month of September, when it shifted to the hybrid setting (2 days on-site learning, 3 days remote learning) from October through December, Lissy remained in 100% remote learning throughout the entire semester.

In 2019, Lissy scored a proficiency level of “Emerging” on the New York State Identification Test for English Language Learners (NYSITELL). This is the second level out of five levels of proficiency, which are Entering, Emerging, Transitioning, Expanding and Commanding. At the Commanding proficiency level, students are no longer classified as English Language Learners (ELLs) and are considered Former ELLs. However, due to the cancelation of the 2020 New York State English as of Second Language Achievement Test (NYSESLAT), Lissy’s proficiency level of emerging is outdated and does not account for any recent potential progress, stagnation or decline in her English proficiency level. Based on her writing samples, classroom interactions, and oral performance, Lissy had the lowest English proficiency when compared to the two other student participants. In fact, for the vast majority of our exchanges, Lissy and I communicated using translation devices while the other students responded only in English.

Lissy stated that her goal in English is to improve in reading and writing of English. She liked her experiences learning English writing because she liked studying new languages and because she believes writing helps her learn English better (first
Lissy has a very good relationship with her ENL teacher, Ms. Vails, and stated “the best thing I like about the teacher is that she provides more help than other teachers” (final interview). She also does not mind when Ms. Vails corrects her and stated, “The teacher is helping a lot. When I read, she corrects my mistakes and in writing, also, she doesn’t just show where the error is but explains why” (final interview). I observed this during one of my classroom observations, when I reported to the school in person and maintained social distancing. As a district administrator I often perform school visits to provide guidance and technical support to school building administrators and faculty, including during the pandemic. When Ms. Vails asked the student to read aloud a question in class, Lissy read remotely to her classmates who were both online/remote and for a classmate, Nyima, who was the only on-site student with Ms. Vails for the class through Microsoft Teams.

Ms. Vails: Lissy, please read the question.
Lissy: When did the Bu...Bu
Ms. Vails: Bubonic
Lissy: When did the Bubonic Plague …
Ms. Vails: arrive
Lissy: When did the Bubonic Plague arrive?

Lissy also believed that it is important to know when you made a mistake in writing. She viewed the teacher’s help in writing as pointing out what is wrong. She stated that she receives feedback on her writing sometimes and she believes the feedback explains the mistakes and is needed for her own progress. She prefers to receive the correct form and words in the teacher’s feedback “so that later on when I rewrite it I will do it without mistakes” (first interview). She doesn’t always understand the teacher’s
feedback and, as a strategy, she asked the teacher questions about the mistakes when revising drafts. Lissy preferred written feedback rather than oral feedback as the teacher can say some words that she may not understand, but if it is written she will be able to read it over and try to understand what it means. She stated that when she sees the teacher’s WCF on her writing, it motivates her to write better next time and that the teacher’s feedback on grammar errors will help her the next time she uses those words to both write and read better (first interview).

My conversations with Lissy took place via the telecommunication platform, Zoom. In the beginning of each session, I requested for Lissy to please turn on her video camera so that I made observe her facial reactions as we engaged in conversation. She immediately turned the video on but had to be reminded for each Zoom session, there was three including the first and final interview, and during the Retrospective Verbal Report. This may be due as all remote students observed in the ENL class had their videos off, and out of habit, she may have started this way during our sessions. Because Lissy was at home, there were instances where her family would call to her or a noise would distract the both of us from our conversation, in which we both looked at each other with widening eye and burst into laughter. Lissy apologized each time and I responded each time to her that there was no need for apologies as this is part of remote learning. I also thanked her at the beginning and ending of each session to show her my appreciation for participating in the study.

Lissy was pleasantly surprised that she had the option to respond in her native language, Malayalam, to the questions. When I said, “you can respond in Malayalam,” she gave a surprised look and replied “Malayalam?” to make sure she heard me correctly
(first interview). Perhaps she did not have the experience prior of someone not fluent in Malayalam, especially in education, to allow her to speak in her native language to fully express herself. This shifted the power dynamic as this positioned the both of us to rely on the use of a translator when usually it is one sided. Lissy chose to speak in Malayalam during the open-ended questioning (first interview) and she utilized English in providing one word or short phrase responses, mostly yes and no. I offered to have a Malayalam speaker to come and serve as an interpreter, but Lissy declined, perhaps as to not be recognized by anyone in the community. She specified that she rather utilize the translator application software, Google Translate, on her cell phone which transcribed and translated oral Malayalam into English, which is then read aloud by the application, allowing the use to both hear and read the translations. In turn, I utilized the application on my phone to capture my questions in English which translated into Malayalam.

Lissy is extremely bright and reworded her responses in Malayalam when she felt the English translation did not capture what she exactly intended to say. Likewise, she provided the word in English that the translator did not use what she intended for as part of her response. For example, during the retrospective verbal report where I reviewed with Lissy the feedback Ms. Vails provided on her letter regarding the Bubonic Plague, I asked questions for each piece of feedback she received. As reflected in figure 4.1, Ms. Vails provided two WCF reformulations with choices in red font as well as questions also in red font that read “What were some of the symptoms of the plague? How did you know that someone had the plague? What did you see on their bodies?” I asked Lissy when she saw this third set of feedback, what did she think? I wondered if she also thought that the questions were also examples of what she can write similar to the WCF
reformulations she received prior. When I asked, I utilized the translator app to capture what I said and repeat it in Malayalam. Lissy responded in Malayalam and the translator stated in English “The teacher told me to write more about blood.” Once the translator finished with “write more about blood” within seconds Lissy clarified and stated “Black Death.” I verified with a native speaker of Malayalam who reported that her original statement should have be translated as “The teacher told me to write more sentences about the Black Death.” Although not 100 percent accurate, the translator application was extremely helpful in bridging the communication and allowing Lissy to express herself fully and allowed me to ask probing questions. It served as a helpful alternative as Lissy did not want a physical person present for interpretation. Later, without sharing the student’s information, I reviewed the audio recordings and transcriptions with a native speaker of Malayalam to capture the original sentences as well as check for the quality of the translations to update the transcription. The native speaker was able to provide clarifications as to Lissy’s preliminary responses before she reworded them.

Although there were moments of laughter with the household noises and moments of frustration experienced with the translator application, the relationship dynamic very much felt like a student with an educator. During the beginning of each conversation, I requested the student’s assent and confirmed the parent’s consent for the video recordings, which set the tone of official education business as noted in my demeanor during my interactions with Lissy. This may have influenced her responses regarding her motivations to respond to WCF.

For Lissy’s writing task within the class topic on the Bubonic Plague, a set of lessons within a unit entitled “Pandemics through Time and Space,” where students study
pandemics from the Black Death through the HIV/AIDS crisis and compare it to their experiences with the coronavirus. The writing task was to write a letter. Within the letter, she was to imagine herself living in the time of the Bubonic Plague and write a letter to family member explaining what it is, the symptoms associated with it, and how to avoid contracting it. Lissy was the only student participant that understood the writing task prompt and wrote about the Bubonic Plague within her letter. Ms. Vails reported that the other students wrote a general letter to a family member that did not address the writing task at all (Retrospective Verbal Report).

Lissy wrote 3 sentences with 42 words using the PowerPoint slides provided by the teacher and submitted it on Microsoft Team, the platform where students use for telecommunication as well as repository for instructional materials, assignment submissions, and the student’s grade book. The draft contained 3 grammatical errors, including 2 errors on missing definite articles before the proper noun and superlative as well as a sentence fragment with the missing auxiliary verb. The teacher copied the student letter and pasted it into a Word document and parsed out each sentence that contained errors by copying and pasting the sentences with the revision below it. Lissy received two very explicit WCF, reformulations, that included two examples of reformulated sentences in a red font color for each of the two sentences that contained the aforementioned errors. One sentence reflected a sentence fragment “you safe” while the other sentence contained the two missing definite articles before the proper noun and superlative. Figure 4.1 is a screen shot of the teacher’s WCF reformulations with additional examples that Lissy is able to choose from that reflects best her sentiments, be it a statement or question she was posing.
Lissy revised her draft and included 2 correct revisions that covered the two missing definite articles in one sentence, and the auxiliary verb “are” in the first sentence. All original errors were corrected. Her revision draft included 5 sentences and 57 words, an increase from the first draft as the teacher elicited more details in addressing the writing task. As a result, new grammatical errors surfaced, including a missing auxiliary verb “was” and the omission of a preposition of time when referring to dates. When asked if the WCF was helpful, Lissy stated “yes, because the next time I write it will be helpful” and “next time I will write better.” (Retrospective Verbal Report). She also liked using the computer while drafting her letter as “I like using the computer for the grammar, when there is a mistake the computer lets you know” (final interview). Despite remote learning, Lissy felt that “this semester was able to help me improve my English” and “I was able to write full sentences without mistakes. I was able to check on my grammar in sentences.” (final interview). This can be attributed to having received WCF
from both, the teacher once the draft is completed, as well as instantaneously as she drafts the letter using the automated spell checker.

Babu

During the school re-entry of September 2020, Babu was a 9th grade student who is very charismatic and often volunteers during class to respond to questions. Like Lissy, Babu is a Newcomer ELL who arrived to the U.S. from India in 2019 and his native language is also Malayalam (first interview). He stated that he only knew two languages, Malayalam and English (first interview). However, one difference is that he received formal instruction in English in India prior to his arrival to the U.S. His ENL teacher, Ms. Vails, found Babu to be very fluent in his speaking but that it doesn’t always translate into this writing (Retrospective Verbal Report). Ms. Vails also identified his proficiency level as Transitioning (level 3), although in his 2019 NYSITELL examination, he scored Emerging (level 2). Therefore, his proficiency may have progressed since then. Babu and Lissy are in the same ENL class as required by their mandated ENL services based on their proficiency level. In his writing diagnostic completed in September, he wrote that he likes sports, especially soccer, his favorite food is pizza and that he lives with his mother and brother. He also wrote that he finds remote learning difficult sometimes as there are “a lot of distractions while doing his work” and “it is hard to concentrate, but I promise to try my best.” Babu also included that he is excited to be back in school because he misses his friends.

Babu at the time aspired to become a medical doctor and his goal was “to read more books and learn more items. Like learn more knowledge. That’s my goal” (First interview). He believed that learning English is “very important” in his future life and in
his career after graduation “because when we graduate if I study English, I need to talk, I’ll talk well if I study” (first interview). Although COVID-19 has not directly affected Babu or his family, he is engaged in 100% remote learning from September through December. He stated that online learning is nice because “we don’t want to go outside, we want to stay inside,” suggesting concern on the potential exposure to the coronavirus. However, he found that in-person learning is better since “we can ask questions, doing work together as a group. Online is good, but not that good” (first interview). Because this question was asked in September 2020, his response may have resulted from his experience during the abrupt school closures during the Spring 2020 at the height of the pandemic. He stated that “I was safer, but I received less knowledge” compared to being in the school during the Spring 2020 school closures. During the Spring 2020 school shutdown, there was not a fixed class schedule for students to engage in online learning synchronously. In contrast, during the Fall 2020 re-entry, teachers reported to their classroom and engage with student synchronously during scheduled times during the day.

Babu indicated that he likes the new digit tools he is learning during the Fall 2020 semester, especially Teams as it “makes it easier not needing a web browser, just the application” (first interview). He is referring to Microsoft Teams and the application, which can be downloaded unto the computer, not requiring students to having to log on each time with a user name or password to seamlessly access classes and instructional materials. Babu liked typing on a keyboard when writing compared to a paper and pen. However, he also indicated that writing on paper “It’s good. It’s like to write more like improving your handwriting and if you write, it’s like more we can memorize easier” (first interview). As the semester progressed, Babu felt that “in the beginning of the year
was a little bit hard but now it’s getting a little bit easier because now I know how to use
the computer and Teams and stuff like that” (final interview). He also shifted his
preference to online learning as he stated that it is easier to learn with the computer
because of applications such as Teams versus coming in-person to school; “When you go
to the teacher’s page, all the stuff is together at all times, but in person the stuff gets lost.”
Therefore, as Babu became more familiar with the digital tools, his views on in-person
learning versus online learning shifted.

Babu stated that he likes his ENL teacher, Ms. Vails, since “she helps me a lot
both last year and this year to speak more English” (final interview). Therefore, Ms.
Vails and Babu has developed a relationship prior to the Fall 2020. Like Lissy, Babu also
felt that his ENL teacher helps him more than his other teachers in speaking and giving
examples of words such as “verb,” a metalinguistic term (final interview). He also finds
Ms. Vails to be “more fun” than other teachers through the use of Bitmojis, where the
teacher creates an avatar of herself within a virtual classroom in providing a cartoon
version of their virtual classroom space. Babu also found learning English and English
writing to be easier because of his ENL teacher, who uses PowerPoints and videos that
help him comprehend better with the visuals, text and multimedia. Although his camera
is off during classes, he was an active participant in class (classroom observations). He
often volunteers in class to answer the teacher’s questions and read passages. In one
instance, when the teacher asked the whole class a question regarding the spread of the
Bubonic Plague as represented on a map, after a few seconds of silence, Babu was the
first to chime in. The teacher negotiates for meaning, prompting Babu to refine his
pronunciation to ensure comprehensibility.
Ms. Vails: What does this map show us?
(19 seconds lapsed)
Babu: Disease
Ms. Vails: Cities?
Babu: Disease
Ms. Vails: Oh disease
Ms. Vails: Over what period of time?
Babu: 1346 through 1353
Ms. Vails: Started 1346-1353, that’s over a 7-year period.
Ms. Vails: Thank you, Babu!

With writing in English, Babu admitted “I’m not good at English writing, but I’m not bad at English writing” (first interview). He stated that he enjoys writing in English and his strengths are in capitalization and good handwriting. His challenges are with “some words” that he requires a dictionary for the spelling and meaning. He also believed that writing skills are very important in English learning because it helps him memorize it and that as he reads more books, his writing gets better. When asked how important is grammar in English writing, he stated it is very important because “If there is no grammar, there is no English” (first interview). He also viewed teacher feedback as letting him know his writing as “good or bad”, and that he likes the teacher’s feedback “because the next day we can improve the writing” (first interview). When asked how he felt about seeing the teacher’s feedback on his mistakes, he stated “I feel good. I like to know if it’s good or bad what I am writing. You need to know because next time I can improve” (first interview). He understood that there are “some grammar things I don’t know but with practice and the teacher’s feedback I’m getting to know it” (final interview).
In his writing task, Babu was to write the same letter discussed in Lissy’s profile. However, Babu wrote a letter to a family member that did not follow the writing prompt, which included discussing with a family member the Bubonic Plague, its symptoms, and how to avoid infection. As a result, Babu and the rest of the participants, with the exception of Lissy, had to write a second draft that directly addressed the writing prompt. Thus, Babu’s writing task represents a second version that the teacher provided WCF on.

The subsequent revision was Babu’s third draft, whereas Lissy only had to write two having followed the writing task prompts from the onset. With Ms. Vail’s WCF on Babu’s second draft, she addressed the morphosyntactic errors with direct WCF by crossing out the subject-verb agreement error “is” and providing the correction “are,” as well as crossing out the definite article use “the” where the zero article should be. In the same approach to Lissy, Ms. Vails left Babu’s writing in tack and copied and pasted the sentences that she identified as requiring WCF, and parse out each of these selected sentences separately. In contrast to Lissy, Ms. Vails did not engage in reformulation WCF, but provided direct WCF on the sentences with metalinguistic explanations to explain the difference. Figure 4.2 is a screen shot of the WCF provided to Babu discussed above.

**Figure 4.2**

Direct WCF with Metalinguistic Explanation

```
Hi, Niël. I am Babu. I hope you are doing good. How is the are things going there?

*How are things: “Things” is plural, so we need to use “are” so the subject and verb agree.

*Don’t forget to put a question mark after a question. It’s not a statement, so we don’t use a period.
```
You will notice that the teacher also provided feedback on punctuation. For the purposes of this study, punctuation, capitalization and spelling are considered as writing conventions and separate from morphosyntactic errors, which is the focus of the study. Although explicit, Direct WCF provided in figure 4.2 in this manner is less explicit than completely reformulating the sentence for the student to read and adopt into their revision as in the WCF in figure 4.1. This difference in explicitness in the WCF rendered across students is indicative of the teacher’s differentiation in accounting for multiple factors, including the students’ varying proficiency levels, the nature of the grammatical errors, as well as student needs.

In addition to the differences across students, Babu received different levels of explicitness in WCF within the same writing task. The teacher provided another direct WCF form to Babu, including indicating the location of the error, and providing sentence starters and sentences for Babu to noticed the nature of his subject-verb agreement error. The way the teacher posits this form of WCF reflects a less explicit form of Direct WCF, where the location and correct form is provided. As shown below in Figure 4.3, the teacher brings into attention the subject-verb agreement error and the use of the conjunction “and” but doesn’t provide the correction outright.

Unlike reformulation WCF, the example above indicates that is there is only once section within the sentence that is experiencing a morphosyntactic error, making it less explicit than figure 4.1. It is common for ELLs to inflect the verb to the nearest noun. In this case, the “to be” verb “is” was modified based on the noun adjacent to it, which was disease, instead of the subject noun which is “symptoms”. Instead of taking the approach in Figure 4.2 and simply providing the correct form “are” and crossing out “is” and the
conjunction “and,” Ms. Vails provided samples of sentence starters and sentences for the student to implicitly notice that the verb “are” is utilized whether it is in close proximity to the subject or not.

**Figure 4.3**

*Less explicit direct WCF with location of error and options for correction*

<table>
<thead>
<tr>
<th>I think you are safe. The symptoms of the disease (is changed and) black or purple spots or any other part of the body, sometimes a few large ones, sometimes many little ones.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Good job! I like how descriptive you are in this sentence.</em></td>
</tr>
<tr>
<td>• The symptoms are ...</td>
</tr>
<tr>
<td>• The symptoms of the disease are...</td>
</tr>
<tr>
<td>• The symptoms of the disease have changed...</td>
</tr>
<tr>
<td>• The symptoms of the disease change from black to purple spots.</td>
</tr>
</tbody>
</table>

Therefore, figure 4.3 reflects a WCF that is less explicit when compared to figure 4.2. The differences in explicitness with the WCF Babu receives is also indicative of how Ms. Vails is also differentiating within student’s writing. Providing different WCF based on factors such as the nature of the grammar error, revealing the systematic and individualized approach across student writing and within student writing. In his revision of the writing task with the teacher’s WCF, Babu completed 5 correct revisions that included 2 errors in subject verb agreement, 1 zero article correction, 1 verb tense of “know” and 1 subject noun omission.

In discussing which types of WCF Babu prefers, he indicated that when the teacher underlines his mistakes “it’s good” since it prompts him to look up the word in the dictionary. (first interview). When asked about being provided the correction, he
stated that he also likes being given the corrected form by the teacher, but when asked which WCF is better, underlining or being given the correction, Babu stated “underlining” (first interview). Unlike, Lissy, who prefers to be provided the location and correction, which is understood in the literature as direct WCF, Babu prefers to be told the location of the error but not be given the correction because this would position him to “look it up [making] it is easier to memorize” (first interview). Babu’s preference reflects an indirect WCF practice, a more implicit approach. When asked what he would suggest to his ENL teacher to help improve his writing, he stated for Ms. Vails to continue providing feedback on his grammatic mistakes because “it is important for me to learn it” (final interview) and underline or highlight the errors in his writing (first interview). This practice provides more responsibility on the student to find and correct, using self-regulatory practices, whereas direct WCF reflect more other-regulatory scaffolds.

Babu also indicated a preference for handwritten WCF versus digital WCF “because digitally its harder” and he provided the example of why digital is harder, “when the internet went down,” (first interview) which shows how the teacher’s feedback is not always accessible when the internet connectivity is off. In fact, during the first couple of weeks in September, the school consistent lost internet and student could not access their teachers as teachers reported to the school buildings in providing instruction. However, Babu’s WCF preference later changes at the end of the semester to include that for grammar mistakes in his writing, it was helpful for the teacher to provide the word, especially for new words he is unfamiliar with (final interview), which reflects a shift in his perspective. He clarified, for words he should know, just underline the mistake to
help him memorize, but for new words the teacher should provide him the form.

Regardless of the WCF type, Babu believed that the teacher provided WCF “on grammar mistakes to improve the writing and your knowledge” (final interview).

My interactions with Babu were all held via the telecommunication platform Zoom, and, like Lissy, I also had to prompt him each time to turn on his video camera. His demeanor appeared to be very opened and he took time to think about his responses before responding. Once he responded, he spoke very confidently. Although I reminded him that he can respond in Malayalam, he responded to every question in English. During our sessions, we did not experience any interruptions within the home nor with the WIFI. My demeanor still felt as one of an educator, similar to my experience with Lissy, as I engaged in questioning to gain an understanding of his experiences and beliefs.

*Nyima*

Nyima was a 9th grade student, who like Babu, also had Ms. Vails last year as her ENL teacher prior to September 2020. Nyima arrived to the U.S. in 2017, almost 3 years ago from the Ivory Coast. Under NYSED, she is considered a Newcomer ELL, as this designation is for ELLs who have migrated to the country 0-3 years. Nyima was actually born in the U.S. and was raised in the Ivory Coast as far as she can remember. Her first language is Mandingo and she was learning French while living in the Ivory Coast. She began learning English when she arrived to the U.S. which was prompted by the passing of her mother. Nyima appears to be a very happy student as she always has a smile during class, during her interviews with me, and has an infectious laugh.
Nyima has an English proficiency level of “Transitioning,” the third out of the 5 levels of proficiency based on the NYSITELL that was administered in 2019. Although she arrived to the U.S. three years ago, she arrived to a New York State school in 2019, and each state has its own ELL identification process for identification and testing which accounts for the gap between the year of her arrival and her NYSITELL exam year. When asked what was her goal in learning English, Nyima stated “My goal is to get my grades up this year and work on my writing and reading, how to use my own words” (first interview). Nyima was an aspiring writer and felt that her goal would help her reach it “because I feel like I want to work more on my English learning. I just kind of feel like especially my writing because I see myself in writing books in the future” (first interview). When asked what kinds of books does she see herself writing, Nyima responded “I want to write fiction books” and finds her English classes “will help me become a writer after I graduate high school” (first interview).

Nyima expressed an appreciation for both in-person and remote learning but stated that she would like to go to school because “it has been so long” (first interview) referring to the school closures in March 2020. She also expressed concerned that even when school opened “we will not be able to be next to each other, like sit together, we can’t go next to each other” referring to the social distancing requirements of maintaining six-feet away from one another. When she stated this in September 2020, the school was under full remote learning during the month of September; however, there was not a structured class schedule with specific times for synchronous instruction during the Spring 2020. Although Nyima expressed her desire to return to school, she felt that she likes online learning more that in-person “because the teachers are explaining more so
you know what you doing” (first interview). This suggests that due to the nature of remote learning, teachers are providing elaborated and explicit directions with instructional tasks as both, students and teachers, are navigating together the digital platforms. But at the same token, Nyima also felt there are aspects with in-person learning that cannot be done remotely:

It is more good because teachers just step up to you, look at your paper and look how you doing. They can touch the paper and say ‘oh this is not right’ and they can read it to you. Now it is not really like that, like you got to read everything on your own and text your teacher if you don’t understand (first interview).

Once the school opened for hybrid learning, Nyima took the option of reporting to school for two days and remote for three days from October through December 2020. During classroom observations when Nyima was physically present in class, she was the only student there with the teacher. She would interact with her classmates via Microsoft Teams while she was on site. At the end of the semester, her preference solidified for in-person learning:

I thought online classes were better than school learning. But to be honest, I definitely change my mind about that. I feel like school learning is better than online learning. Because we don’t really learn that much stuff. And if we are in school the teacher comes next to us and explains more. But like when we online, classes it’s not the same (final interview).

Nyima showed appreciation for Ms. Vails and stated “my ENL teacher helps a lot and Ms. Vails would even text to explain more” (first interview), demonstrating how communication can occur both synchronous and asynchronously through the Microsoft Teams chat function. Like her classmates Lissy and Babu, Nyima stated that compared
to her other teachers, the difference is in the help they receive from Ms. Vails. Based on the interviews and data, it appears the ENL teacher provides more language support and is readily accessible to students compare to content area teachers who may be more focused on the delivery of the content versus the language features. Nyima gives an example that Ms. Vails “helps a lot with grammar because in class we write a word so people can read it and then after they read it, they will try explaining it. And then even when we do an assignment, what we did in class will be in the assignment so you know what you are doing” (first interview). Nyima found that she learns “more words, how to write sentences, a paragraph in my ENL class, like the class is very helpful” (first interview).

In addition, Nyima expressed that she liked her ENL teacher since she had her as a teacher last year, “I’ve been like Ms. Vails because last year I had her. She used to help my ELA teacher in her class” (final interview). This revealed that Ms. Vails provided integrated ENL to Nyima last year, where the English Language Arts (ELA) and ENL teacher coteach a class in order to ensure the content is accessible for ELLs within the class. This year, Nyima and her classmates are receiving Standalone ENL services, where only a small group of ELLs receive an instructional period for targeted English language development, thus why they are now learning new words such as metalinguistic terminology. Both Standalone and Integrated ENL services are mandated services as per the NYS Chancellors Regulations Part 154 Units of Study (NYSED, 2020c). Specifically, the Standalone ENL classes are required for ELLs with proficiencies including Entering through Emerging, with flexibility for transitioning students, thus why Nyima is in the class. In contrast, Integrated ENL services are required for all ELLs across all
proficiency levels. Like Babu, Nyima stated that Ms. Vails is fun, “her class is fun, her learning is fun because she explains what she is doing. Even if you understand it, she has a way to explain it to you until you like understand” (final interview).

Nyima also described her experiences of learning writing in high school so far as having “learned new words, such as verbs and nouns and different parts of a sentence that I didn’t know before” (first interview). This reflects that her English instruction has recently included metalinguistic terminology in becoming familiar with parts of a sentence. Nyima expressed much passion for writing when she said “writing is a big thing to me. I express myself in writing. Like I can write for an hour and thirty minutes” and “people say writing is hard but I really express myself in writing” (first interview).

In addition to these sentiments on writing, Nyima stated that her strength with writing is that “sometimes my writing makes sense and writing short stories sometimes I feel like it’s really good. I believe in my writing sometimes” (first interview). She clarified that writing makes sense when “it is in the right order” referring to syntax. Nyima did expressed challenges that she faced when writing, including “I don’t’ know when to end a paragraph, I don’t know how to stop” which is evident in her writing samples of long run-on sentences within the diagnostic writing and letter writing task on the Bubonic Plague. That is perhaps why she stated that a good essay should “have paragraph, know when to stop by using a period, explain well, and using a period” (first interview). She stated twice the need to use a period. This is reflected in her sentiment that in addition to writing, writing skills are important; “I feel like writing skills are really important, like really, really important” (first interview). For this study, errors in punctuation, along with errors capitalization and spelling, are considered writing
conventions, separate from morphosyntactic errors. Writing conventions errors were collected and analyzed, but are not of interest to this particular study as the capitalization of proper nouns (e.g. Bubonic Plague) did not change the meaning of the sentence.

In addition to writing conventions, Nyima believed grammar is critical in the writing process as it “is really important so that readers can read and understand it more” (first interview). She believed that she finds it “really helpful” when teachers circle words and provide an explanation because it “really helps me to understand it and know how to really use grammar” (first interview). When asked how it helps her, she stated “by reading the teacher’s feedback again and again, when I fix it, I will check to make sure I didn’t make the mistake again. If I did, I will rewrite it and I don’t mind because I like writing” (first interview). She also stated that sometimes the teacher’s feedback confuses her when it is on her writing and prefers it to be on the margin. This aligned with the approach Ms. Vails rendered to her students by providing the students writing untouched and parsing out the sentences with WCF as needed.

Nyima is very detailed orientated. During class when she reported for in person instruction, Nyima was writing a response on her laptop using PowerPoint on Microsoft Teams to the question about the spread of the Bubonic Plague. As she wrote, she noticed that one of words, “disease,” was written incorrectly because of the automated redline underneath the word through the spell check application.

Nyima: How do you spell disease?
Ms. Vails: d…i…
Ms. Vails: Class, can someone help Nyima spell disease?
Babu: d-i-s-e-a-s-e
Ms. Vails moves to the next slide.
Nyima: I still need the spelling of disease.
Ms. Vails returns to the slide with the sample response and points to the word Nyima compares her spelling to the word on the board and corrects
Ms. Vails: How did you know you had it wrong? Was it the red squiddly line?
Nyima nodded: Yes, and it went away.

In her writing task, Nyima wrote a letter by hand rather than using the Word processor application in Microsoft Team. She took a picture of her written letter and uploaded it unto Microsoft teams to submit it. Like Babu, Nyima originally wrote a general letter to a family member without addressing the writing task prompts of describing the Bubonic Plague, the symptoms and how to prevent infection. Thus, this was the second draft of her letter. In the picture it was noted that one can see multiple drafts of the writing task. Ms. Vails indicated that when Nyima found a mistake she redrafted the letter rather than crossing out the mistake in order to impress me, the researcher (Retrospective Verbal Report). This reinforces the notion that I, knowingly or not, am an active agent within the environment that I wish to study. Nyima also stated that she rewrote the draft multiple times as she reread it while finding mistakes (retrospective verbal report).

Ms. Vails accomplished the same strategy of leaving the complete version of the student writing separate of her WCF so that students can compare, as well as parsing out the sentences that contained grammatical errors and providing the correction underneath. Being unable to copy and paste the student text, Ms. Vails ingeniously accomplished quickly by using the photo cropped function on her computer. Figure 4.4 shows how the teacher was able to hone in a particular section of the student writing by photo clipping the area that contained an error on verb tense as well as a syntax error so that students can quickly locate it on their draft while reviewing the WCF. Ms. Vails provided Nyima
with direct WCF, where she provided both the location of the error and the corrected form. Ms. Vails did not provide the metalinguistic explanation for the changes in syntax and the use of the suffix -ed to indicate the past tense as she did with Babu because “[Nyima] wouldn’t understand it” (Retrospective Verbal Report). This suggests that the types and the explicitness of WCF rendered by ENL teachers takes into consideration the student’s needs as well as the background knowledge they possess. For Nyima’s writing task, the WCF feedback also included highlights. Unlike Lissy and Babu, where the corrections were indicated in red font, within Nyima’s feedback it also included the highlights. This was in order to distinguished between the WCF and the feedback on the content that teacher placed in between the screen shot of the student writing and the teacher’s WCF.
Ms. Vails did provide direct WCF with metalinguistic explanations on other grammatical errors, such as verb tense correction, shown in figure 4.5. This puts into question the background knowledge that Nyima has for the teacher to believe that the student would not understand an explanation on the past tense -ed versus the formulaic explanation of the present progressive. However, because Ms. Vails has experience teaching Nyima last year, she has a better understanding of Nyima’s background knowledge.

Nyima received 15 WCF interventions on her task, including 5 direct WCF without metalinguistic explanation and 10 direct WCF with metalinguistic explanation. The direct WCF without explanation versus with metalinguistic explanation was systematic. There were 2 verb tense errors due to missing suffix -ed that did not receive metalinguistic WCF. In her revision, she accomplished 12 correct revisions; however, she missed 3 errors that were coded as “no revisions errors,” with 1 corrected grammatical revision without the teacher’s WCF (1 verb tense -ed error). The last correction, which was done completely without any indication from the teacher, provides evidence that the student took the learning from one area in her writing that (e.g. 2 verb tense -ed errors) and applied it to a third error that teacher did not provide any feedback on. However, the 3 “no revision” errors suggests that there were some items that the student did not perceive and/or acted upon. These included 1 subject-verb agreement “to be” correction and two noun number plural -s suffix errors. The noun number plural -s suffix errors were six in total on the writing task, with five receiving WCF and only three being addressed by Nyima. Nyima stated that she didn’t notice the noun number plural -s errors that she missed because she was rushing to get the revision done. Thus, time
dedicated to revision also impacts the efficacy of WCF provided. This is further reinforced when ask when she revises next time would she keep in mind the feedback her teacher gave, she responded “Yeah, but it depends. When I’m rushing I don’t read the whole thing and I just rewrite” (last interview). Ms. Vails incentivized students to complete the revision for a higher grade, but it had to be done independent of class time. This may be a consideration when affording the time and space for students to do it at home versus class.

Figure 4.5

Direct WCF with Metalinguistic Explanation

“I know you laughing at me right now.”
“I know you are laughing at me right now.” When you are talking about what someone is doing right now, we need to use the Present Progressive Tense which is the verb “be” + “verb+ing”. The subject is “you” and the verb “be” changes to “are”.

When asked about Ms. Vails’ feedback on grammar over the semester, Nyima replied “It was like, it was kind of like I know how to do this, how did I make these mistakes. It was kind of helping me for the next time so I do not make the same mistakes” (final interview). This referenced how WCF brings awareness to students of the grammatical form and makes them cognizant of what they are writing versus what they intended to write. I was very concerned when Nyima stated that she doesn’t remember receiving feedback on grammar last year (last interview). Perhaps because she was not attending an ENL Standalone class, her content area classes did not afford the feedback on her grammar. This speaks to the need of building equity and access to ELLs
by providing grammatical feedback, specifically WCF, for English language and writing development.

When asked how she felt when she received her writing back with WCF, she stated “actually makes me feel better because I feel like at least they telling me what I did wrong and the next time I can actually do it way better” (last interview). She also stated that at the end of the semester in December, “Now, I know how to correct my sentences,” and when asked how did she learn, “oh well when my teacher correct me” (last interview). This reinforces the notion that learning is not only the product (e.g. correct grammatical form), but also the process towards the product. Nyima’s suggestion to the teacher was “always tell me what I did wrong and what I did good so I can work on that better, and what I did wrong so I can work on that too so that my next writing will not be perfect but better” (last interview). When asked to clarify if she wanted Ms. Vails to correct all her mistakes, she replied “if she can because there are more kids in the class, but if she can show me five mistakes that I did, that’s good” (last interview). This suggests that Nyima is aware of how time consuming it may be to provide WCF, especially with multiple classrooms with different students.

Although Nyima was a hybrid learning student from October through December 2020, our interactions during the interviews and the retrospective verbal report were held over the Zoom telecommunications platform for the safety and well-being of the student during the pandemic. Like Lissy and Babu, during each instance, I requested Nyima to pleased turn on her video camera. Which she did and always greeted me with a huge smile. During our interactions I reminded Nyima that if she wished she was able to respond completely in Mandingo, French and a combination of the two in addition to
English; however, she responded to my inquiries only in English. Nyima spoke extemporaneously, requiring little to no time when she responded when compared to Lissy and Babu, and always with a smile. During the sessions, a small toddler in the home would speak to Nyima, or try to grab her head while she or I spoke. Although frustrated as Nyima would tell the child in English to stop, she always smiled, laughed and apologized to me each time. I replied that there was no need for apologies as this happens with little ones at home and I laughed with Nyima whenever the toddler would try to gain Nyima’s attention. Nevertheless, the demeanor, I felt, was similar across all three student participants, one of students interacting with an educator. This, I believe, is due from the onset of each interview when I formally requested the assent of the students and the consent of the parents for the recording of the sessions.

Ms. Vails

Ms. Vails is a NYSED certified K-12 English to Speakers of Other Languages (ESOL) teacher with 10 years of experience teaching ESOL to adults in a local community college. She taught adult English learners within the college’s bridge program for those who “have minor issues in academic English” as they transition to higher education (first interview). She has also taught courses specific for “English for academic purposes.” I met Ms. Vails back during the Summer of 2018. I just had completed my first full year as a district administrator. Having spent the year looking through resumes and interviewing candidates, Ms. Vails was by far the most memorable. Prior to our meeting, I received in the office mail a wrapped box, appearing to be a gift. When unwrapped and opened, it revealed an attention-grabbing resume with colors and images, her qualifications, and digital links to see her archived work. In addition, Ms.
Vails included artifacts of tactile tools for teaching English to Multilingual Learners that appear to be handmade. When I interviewed Ms. Vails, she spoke about contemporary second language learning methodologies, referenced theorists and research, and discussed the importance of cultural relevance and social emotional support. Although I was unable to offer her a position at the time, as there weren’t any vacancies, and because she had left such an impression, I remembered her quickly when a maternity vacancy surfaced in January 2020 within an ENL middle school position, almost two years after her initial interview and right before the school closures at the height of the pandemic.

Ms. Vails experienced a trial by fire with the shift in working with adults within a higher education setting into the K-12 sector mid-academic year. In addition, she had quickly adjusted to remote learning from March through June 2020. The principal of the middle school highly praised Ms. Vails’ work. She also worked during the district’s subsequent Summer 2020 Virtual Summer programs for elementary students. When a tenure track ESOL teacher vacancy surfaced at another high school, I recommended Ms. Vails for hire. She began her tenure track position during the Fall 2020, which is at the start of this study, where she teaches 9th through 11th grade ENL. The teacher was recruited for the study through a mass email that was sent out to all ENL teachers throughout the district. Only Ms. Vails and another ENL teacher volunteered. It may have been a way to show gratitude towards me, but Ms. Vails earned her tenure track position and my respect through her own efforts and exemplary service. To have had her and her students participate in the study was an honor and a privilege to which I am forever grateful. The trial by fire continued as Ms. Vails engaged in simultaneous teaching from October through December 2020, where she taught the in-person students
and the online students via Microsoft Teams concurrently. This is by no means an easy feat.

Ms. Vails believes she is very grammar orientated since “growing up I want to Catholic School and grammar was very important. They did sentence diagramming and I found it fun as you were either right or wrong” (first interview). She found grammar fun in contrast to the literature component of her English classes as a student because “there was more gray area.” She also stated that having analyzed the NYSED English Regents examination, a graduation requirement that often holds ELLs from graduating on time, she believes that her teaching style has shifted and will be more grammar-based to support the writing when compared to the communicative approach with her adult class experience. Ms. Vails attributes this to the difference that ELLs need to pass tests in order to graduate, and the majority of the tests have large portions of writing when compared to her experience in higher education.

Although morphosyntax is on Ms. Vails radar, her approach to teaching English to ELLs was vastly different to the methods describe when she attended school. Ms. Vails and her students (Lissy, Babu and Nyima), stated during their interviews that her lessons are “engaging” and “fun” respectively due to the interactivity and multimedia use. Ms. Vails attributes this to her use of interactive programs, such as PowerPoint presentations with videos, images, translations, click and drag applications. The students also specified Ms. Vails use of PowerPoints, videos and interactive programs make the class “fun.” Figures 4.6 and 4.7 respectively show screen shots of Ms. Vails’ Bitmoji classroom and interactive programs, such as Jam Board, where students clicked, dragged and wrote on collaboratively. Figure 4.6 is an example of the Bitmoji classroom. It
provides a sense of a classroom in the virtual space, inclusive of the teacher’s creativity in decorating her classroom in preparation for the Halloween season.

**Figure 4.6**

*Bitmoji classroom for student engagement*

![Image of a Bitmoji classroom](image)

**Figure 4.7**

*Interactive Digital Program- Jam Board*

![Image of an interactive digital program](image)
Interactive programs, such as Jam Board, was utilized by the teacher in multiple ways, including social emotional learning where students shared their feelings with the class by picking a color digital post it, writing on it, and posting it anonymously as reflected in figure 4.7. Based on the responses, this would lead to the teacher on how to move forwards with the lesson. Ms. Vails also utilized the Jam board for review paintings on the Bubonic Plague and had students described the painting based on what they see.

Ms. Vails utilizes this multimedia for a dual purpose, not just to increase comprehension of meaning, but also to bring attention to the form or structure of the language; “Clipping videos in smaller parts so they are able to just listen to maybe 30 seconds or a minute and then being able to put a sentence up to look at what they’re actually saying and then diagramming” (first interview). Having students interact with her and the digital programs during hybrid and remote learning facilitates the learning process; “so interaction to me is key.”

Ms. Vails also has provided students with tools to amplify students’ language. She provided resources for students such as dictionaries and thesauruses, both digital and print, to assist students define words and amplify their vocabulary, and uses group work “to learn new words to expand the vocabulary in order to find the words that they will need to write” (first interview). She noted that building vocabulary is especially critical for ELLs with “entering” and “emerging” proficiencies, as these students that don’t have the vocabulary or knowledge of sentence structure in English which at the high school causes barriers on multiple fronts:

To me is very important because they are older at the high school level compared to elementary aged students, language learning is different. Younger kids learn
mostly through listening and do not have the embarrassment in experimenting in the language that older students have” (first interview).

She also recognized that entering and emerging proficient students do bring with them knowledge, including knowledge in their first language that they can transfer over through the use of translations and metalinguistic cross analysis. The barrier being that that they are less likely to take risks in using the language due to their self-consciousness and fear of seeming inadequate in the language. To mitigate this, in addition to amplifying vocabulary, Ms. Vails emphasized the importance of creating a safe environment for students to take risks. She works towards creating a safe environment by relationship building through interaction and engagement via her multimedia designs and interactive program integration.

Ms. Vails also noted in addition to the barriers of self-consciousness, ELLs at the high school age cannot always pick up the nuances of English rules implicitly as those whom where raised in English speaking environments. She made the strong case in the building of equity and access for ELLs on why grammar instruction is critical for this population:

I truly believe that when you have a good foundation in grammar, and I always say that a lot of my ELLs a lot of times know their grammar rules better than English speakers know the grammar rules, they just don’t always use it correctly. But when they learn the rules, they are able to apply it. So, I think it’s very important because they didn’t grow up with the language, they have to be taught these rules in order to follow because they can’t always just pick it up by themselves.” (final interview)
Ms. Vails argument is one that I share in building equity for ELLs, especially those within adolescent ages, require an instructional approach to language that makes the subtleties of English grammar salient when compare to their English-speaking peers. It is important to note that grammar instruction, taught in isolation, would not be beneficial to ELLs, but rather should be taught in context and incidentally through content (Lyster, 2007). But the other extreme, which is just as damaging, is the avoidance of teaching grammar altogether to adolescent aged ELLs. Although the quote above also demonstrates that having the knowledge of the grammar rules doesn’t always lead to accurate application of the rules when using the language; however, they will have the tools to apply to their language use as they continue to develop and internalize the rules. These tools make salient what is often hidden to ELLs as they develop the language. Once these tools become internalize, moving from other regulatory to self-regulatory within their Zone of Proximal Development, the more accurate the grammar use will become in their language production.

As part of the English language learning process, Ms. Vails believes that writing helps learners be better at reading, writing and speaking. Due to her current instructional context, Ms. Vails finds writing particularly critical in the high school setting; “depending what your use will be for the language, that will be the focus. Because I’m in a high school, writing is very important in order to pass tests, in order to pass school” (first interview). Ms. Vails provided models of responses for writing tasks as well has giving the vocabulary needed for the writing assignment. This was also referenced in Nyima’s participant profile, where the student suggested there was a coherent connection between what the teacher does in class and her understanding of independent tasks.
Within the context of remote learning, Ms. Vails believes the impact of virtual learning also will negatively affect student writing:

I believe writing by hand would be more beneficial than using the computer. I don’t feel that you have that connection, hand to mind connection, of typing letters versus writing letters, in my opinion. There are more opportunities to copy and paste from a translator or automatic correction. Paper writing doesn’t give you those hints which can distract from the original thoughts” (first interview).

This notion is also reinforced by the understanding expressed by Babu, who indicated that although he prefers typing, he believes that writing by hand is better because it helps him memorize better. In addition to the memorization, the distractions mentioned by Ms. Vails and including email alerts, social media, etc., are all distractions when writing on a computer that a paper and pen cannot offer. This notion was also true for Ms. Vails belief’s in providing corrective feedback. She preferred providing handwritten WCF versus digital feedback as the connection from handwritten note to that same when typed is missing. She provided the example, “Drawing a smiley face is not the same as the use of emojis” (first interview).

Ms. Vails described what are her “look fors” when reading a student’s essay; “With essays, I’m looking for a topic sentence in their introduction. Are they using adjectives to describe feelings? I’m looking for transitions and conjunctions.” She admitted “I’m really grammar based when it comes to essay writing” (first interview). This lens was informed by what Ms. Vails identified as the challenges and strength of her students’ writing. She stated that the challenges in her students’ writing were based on the diagnostic writing samples that were collected and analyzed in this study. She used
the diagnostic writing to inform her instruction as well as for differentiation. She explained:

Being that it is the beginning of the year, I have a writing assessment for them to talk about themselves for fluency. The sentence errors include run on sentences, sentence structure such as syntax and grammar, and academic vocabulary as the writing is very elementary. I write a note what the common issues are as a class I need to address as well as the individual goals for each student (first interview).

In addition to the challenges, Ms. Vails identified the strengths of her students writing, including the use of transitions and punctuation, which indicated to her that the students she had last year (Babu and Nyima) have retrained knowledge from last year.

In addition to providing multimedia approaches for her incidental focus on language form activities, Ms. Vails emphasized the need in building relationships with students for their learning, including when providing corrective feedback. She stated “ultimately, I feel that if you have a good connection with the students, they’ll always take it in a good manner in which they want to do better. They want to, you know, do better, not for only themselves, but even for you. So, the relationship to me is like the utmost importance” (first interview). This is reinforced from the student participant profiles as each student stated that they felt good with the WCF provided and it motivated them to write better next time.

As noted in the student profiles, Ms. Vails differentiated her WCF to students “because you’re always learning in steps and stages so what level that one may be at even if they’re all at an entering or emerging level, or even the transitional level, that there are different levels within those levels. So, what one may get while another may not” (first interview). This reflects the notion that although students may have similar backgrounds
and are on the same proficiency level (e.g. Lissy and Babu), learners individually reflect many factors that reflect a myriad of different levels for different items and will have a differential response to lessons. Tailoring the WCF is one way in meeting each individual students’ need based on where they are reflected on the responses in their writing.

Ms. Vails provided examples of how she would provide differentiated WCF based on proficiency. For entering proficiency students, “I’m making sure that they have full sentence structure. So, making sure that they have a subject and the verb and are using the correct tense by providing it to them” (first interview). This was observed when providing feedback to Lissy with the reformulation WCF. For others, Ms. Vails indicated “If they’re using a wrong tense, I would circle it, make an arrow and, on the side, I would put the correct tense and I would explain why this tense. Those are things that you can’t do with an entering [proficient student], but you can do at the transitioning [proficiency level]” (first interview). Both of these examples are based on proficiency levels and was stated in September, prior to the WCF provided on the three students’ written task.

The second example on the indication of the errors by providing the location of the error, the correction and an explanation reflects the direct WCF with metalinguistic explanation. Ms. Vails rendered this type of WCF to Babu and Nyima, with varying degrees of explicitness based on linguistic error and student. Therefore, in addition to language proficiency levels, there are additional individual factors that impact the WCF rendered by the teacher. The teacher stated “In addition to language proficiency, I feel that depending how they’re writing, I’m always looking to take their writing to the next step. It really depends on what they write and how they can improve” (first interview)
Therefore, Ms. Vails’ decisions on WCF types is also responsive to what students have actually produced in their writing, reflecting their individual needs as writers.

The WCF examples above reflected what Ms. Vails did during handwritten WCF, which during the Fall 2020, all work and feedback was completed digitally. When asked in September how she will render WCF digital due to restrictions on paper exchanges, Ms. Vails discussed her plan in rendering of WCF to the student written task in November. Her description matched what was completed and referenced in the student participant profiles.

I would just make an Asterix with the correction below. I would copy and paste so I leave their writing intact the way it is. I would copy and paste it and then correct the copied paragraph on there so they can actually see it without all the marks… but always being very uplifting when you’re saying things because you do not want to discourage the student in which they don’t want to continue writing (first interview).

As described by Ms. Vails and completed on the students’ written tasks months later, Ms. Vails provided very meticulous and time consuming WCF to her students writing while considering the feelings of the student. She recommends to “start with something positive. I think that’s important because you don’t want to turn them away to what else you are correcting them on”. (first interview).

When asked how did she plan for students to utilize the WCF provided, she stated “If student actually went back and revise their writing based on WCF I provided them with some sort of extra credit or something like that to just always improve on their writing” (first interview). This was the case for the writing task that Ms. Vails rendered WCF to her students in November. All three student participants engaged in the revision, in part to raise their grade, in part for the writing process, but I also believe because of
their participation in the study. Even within her statement, Ms. Vails expressed doubt that students look at the WCF and has the experience that students don’t always look at the WCF provided, but rather just the overall score. Although she incentivizes students with extra credit, they would have to complete the revision independently from class time. As we saw in Nyima’s case, she stated that she didn’t notice all the WCF as she was rushing to finish. In contrast with WCF rendered on paper, Ms. Vails gave the example that at least students would “look at the WCF that was placed on top of their desk while waiting for the class to begin for about 4 minutes” (first interview). In either scenario, for students to review the WCF and engage in revision, more time is needed. Perhaps if given the time during class, it would provide the space for students to take their time in their revision and engage in the writing process. This recommendation was reinforced by Ms. Vails statements on lessons learned when she shared during the final interview in December 2020 described below.

Ms. Vails is a very reflective teacher and discussed her experiences, learnings, and frustrations she faced throughout the semester. During the final interview in December, when asked what was the biggest impact technology tools had on her provision of WCF this semester, she stated that more time was needed for both the rendering of WCF as well as having student perceive and interact with it.

I find that being online, it’s very time intensive and I have also learned that students don’t look at it. They are notified about their grade they see their grade, but when I asked them, you know, ‘did you look at what I wrote to you,’ they’re like, ‘oh no, I didn’t see it.’ It’s like I just spent an hour correcting your work (last interview).
Ms. Vails views the lack of perception and interaction with her WCF from students since “if you want students to really focus on their grammar, you know, if they’re not even looking at what’s being corrected, then it’s a huge loss for me as well as for them” (last interview). This represented an instance of where affordances were made for students; however, as reflected in Ms. Vails statement, students didn’t see it or appears to not even been aware of it, describing the lack of relational and/or interactive opportunities afforded for students with their WCF. The first step is to provide the WCF, and the second step is to provide opportunities for students to interact and engage with it as noted in the ecological perspective within Sociocultural Theory (SCT) and the concept of affordance.

Ms. Vails demonstrated vulnerability, courage and insight as she described to me her “biggest lesson” that she learned for this whole experience, which included “giving that class time for them to complete the work” (final interview). She originally believed, as reflected in her statements above, that the revision be completed at home and would be optional for extra credit. Although an incentive, the relationship is one that posits students to interact only if time permits at home. In addition, Ms. Vails noted “that was a big fail on my part because I realized that the student being online, you know, the entire day when it comes to extensions, like homework, it just doesn’t happen” (final interview). Therefore Ms. Vails thought about next steps for the Spring 2020 semester, “I really need to get that class time. It’s just hard because I feel that sometimes in class, you want to utilize that time for learning, but I think that time is very important for the writing process also” (final interview). In this reflection, Ms. Vails is beginning to shift her mindset that the writing process should include revisions completed during class
time. The drafting process, as understood within SCT, is learning as it is concerned with both the product and the process. The distinction she provides in using class time for learning versus writing is actually one in the same.

Arguably, what could be understood from Ms. Vail’s concern is that more content is needed to be covered to get through the curriculum, especially with the concerns for state standardized testing. Completing writing at home can avoid any pauses in the coverage of content so that “we could just keep going” since “I know writing takes time and that’s why having the writing at home I thought would be more beneficial” (final interview). However, having gone through the semester Ms. Vails empathized with her students in that “I just feel that being online throughout the entire day from eight o’clock in the morning til 2:30 in the afternoon, they don’t want to sit around and do homework afterwards on the computer” (final interview).

Ms. Vails’ belief in grammar instruction remained constant in that it is critical for ELLs. The teacher makes the case that grammar instruction is especially critical within ENL classrooms, since students may only receive this level of attention on their language use within their L2 writing within these classroom environments. Ms. Vails points out that with WCF, she may be the only teacher her ELLs have that provides attention to their grammar as other teachers are more concerned with the content.

It’s very important in my class to correct their English, the grammar part of it, because I feel that in the other content classes that they’re looking to make sure they understand the content. So that’s why I feel that in this class, it’s very important to look at their grammar and to correct their grammar and for them to see it and read it (final interview).
Conceptual, analytic, and linguistic development are needed by ELLs. The provisions of WCF as well as the opportunities to interact with it for L2 writing development will enhance the equity and access to the language that they are currently not receiving in other classrooms. Ms. Vails specified that students are “not learning tenses, syntax in other classes. So that’s why I feel that it is my position to teach that because they need it” (final interview). Students receive feedback from their content teachers such as “Use complete sentences, but there’s no explicit, you know, what is wrong. So, it’s not right, well what am I supposed to do? Where I try to give them that. Hey, this is what it needs to be.” This reflects content area teachers using more indirect WCF that align more for students with higher levels of self-regulation in the language. Where entering, emerging, and transitioning ELLs require more explicit WCF, such as direct WCF. Ms. Vails attributes this approach to the pressure of content area teachers having many more students, “And I know that for an ELA teacher, a teacher to have, you know, 120 students, can you give that feedback to every single student? Realistically, no” (last interview).

In addition to the status of grammar instruction, Ms. Vails also believed that even with the shift to complete digital WCF on student written work this semester, her approach to WCF remained essentially the same. When asked what factors she believed has influenced her provision of WCF this semester, Ms. Vails responded, “Well, I still feel that how I correct my written feedback is still the same of how I used to do it in the sense that I tried to rewrite using their words because I feel like they’ll have a better connection to those statements” (last interview). However, it was noted by me and stated by the teacher during the retroactive verbal report on Lissy’s work of a particular shift in
practice. The practice of copy and pasting the entire student’s written work and parsing each sentence that was being rendered WCF was consistent will all three student participants. When asked why, she stated “I wanted to keep her writing intact… So, when she was going to write her second piece, her revision piece, that she could look back at this to see the difference of structure…” When asked if she has done this before prior to the pandemic, Ms. Vails replied “this is brand new for me” (retrospective verbal report).

The COVID-19 pandemic impacted the teachers rendering of WCF to practices that were completely new to her, in part due to the digital aspect of the tools mediating learning, but also, in part due to the teacher’s considerations of building the relationship between her students and the new instructional environment. When Ms. Vails copied and pasted the students written work and left it intact, it wasn’t just for students to make comparisons with the text that received WCF, but also, Ms. Vails stated “I just feel that online when you see it, it looks like a lot. It looks like a lot of red. And almost like oh my gosh, I did so, you know, I just did a really bad job, you know, and I, I don’t want them to be turned off from writing. I’m trying to create a safe environment for them to take risks in the writing” (last interview). Therefore, Ms. Vails is concern with the relationship her students would have with her and her feedback as well as how her WCF contributes to the learning environment. Student factors, the environment, interaction and relationships, and shifts reflects key themes across the participant profiles and are further discussed in the subsequent section below.
Case study themes

Fingerprints: Individual factors affecting students’ response to WCF

Every learner reflects a set of factors that are unique. Similar to human fingerprints, which are very detailed and distinctive, we as learners leave our individual mark, our identity, not through an impression left by ridges, but rather, an impression left through our voices and writing informed by our experiences and interactions. Our voices, writing and identity are constantly in flux and the impression we leave is shaped through a myriad of factors and combination of factors that reflect the individual experiences that students and teachers have that affect the rendering of and response to feedback, including WCF. The emergence of this theme, the fingerprints, surfaced during the analysis of the data, as the role of the students and teachers’ individual factors played a significant role in the impact the WCF had on L2 writing development during the COVID-19 pandemic. The individual factors include language abilities and beliefs. These factors were identified within the data including the first interviews, diagnostic writing, writing tasks, retrospective verbal reports, revision tasks, final interviews, and classroom artifacts collected.

Language Abilities. In alignment with the fingerprint metaphor above and the SCT tenet of the Zone of Proximal Development, every student reflects a set of factors that are unique and are within different stages of their language development in English. This is represented in the proficiency level categories as identified by NYSED through the New York State Identification Test of English Language Learners (NYSITELL) and the New York State English as a Second Language Achievement Test (NYSESLAT). While the NYISTELL is utilized for ELL identification and the NYSESLAT for annual
progress, both utilize the same set of proficiency levels. Figure 4.8 is a chart from the NYSED (2020d) NYSESLAT Parent Information Brochure and it shows the five proficiency levels utilized to differentiate ELLs based on proficiency and description of the characteristics of ELLs within the respective levels.

**Figure 4.8**

*NYSED ELL English proficiency levels and descriptions*

<table>
<thead>
<tr>
<th>Level</th>
<th>Description of English Language Proficiency Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entering (Beginning)</td>
<td>A student at the Entering level has great dependence on supports and structures to advance academic language skills and has not yet met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).</td>
</tr>
<tr>
<td>Emerging (Low Intermediate)</td>
<td>A student at the Emerging level has some dependence on supports and structures to advance academic language skills and has not yet met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).</td>
</tr>
<tr>
<td>Transitioning ( Intermediate)</td>
<td>A student at the Transitioning level shows some independence in advancing academic language skills, but has yet to meet the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).</td>
</tr>
<tr>
<td>Expanding (Advanced)</td>
<td>A student at the Expanding level shows great independence in advancing academic language skills and is approaching the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).</td>
</tr>
<tr>
<td>Commanding (Proficient)</td>
<td>A student at the Commanding level has met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings). A student at this level is no longer considered an ELL student, but is entitled to receive two years of Former ELL services.</td>
</tr>
</tbody>
</table>

As reflected in Table 4.1 below, the student participants are identified with two proficiency level categories, Emerging and Transitioning. These both represent an intermediate proficiency, specifically a low intermediate and intermediate respectively as per NYSED descriptions. Lissy and Babu’s proficiency level of emerging is described as
has having some dependence on supports and structures to advance academic language skills, whereas Nyima’s transitioning proficiency level is described as showing some independence in advancing academic language skills. This accounts for the differences of WCF Ms. Vails employed in providing supports for academic language skills represented below in Table 4.2. It is important to note that the teacher does not distinguish the types of WCF by the formal terminology as outlined in the WCF literature, but rather, she identifies them by the action she took when correcting grammatical errors (retrospective verbal reports).

Table 4.1

Participant proficiency levels, assessment, years in the U.S. and ELL category

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>Proficiency Level</th>
<th>Assessment</th>
<th>Years in the U.S.</th>
<th>ELL Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>Emerging</td>
<td>NYSITELL 2019</td>
<td>1.3</td>
<td>Newcomer</td>
</tr>
<tr>
<td>Babu</td>
<td>Emerging</td>
<td>NYSITELL 2019</td>
<td>1.1</td>
<td>Newcomer</td>
</tr>
<tr>
<td>Nyima</td>
<td>Transitioning</td>
<td>NYSITELL 2019</td>
<td>2.9</td>
<td>Newcomer</td>
</tr>
</tbody>
</table>

Table 4.2

WCF types and level of explicitness rendered to student participants

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>WCF types received</th>
<th>Explicitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>Reformulation with options</td>
<td>Most explicit</td>
</tr>
<tr>
<td>Babu</td>
<td>Direct WCF with metalinguistic explanation</td>
<td>Very explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF without metalinguistic explanation</td>
<td>Explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF with examples</td>
<td>Less explicit</td>
</tr>
<tr>
<td>Nyima</td>
<td>Direct WCF with metalinguistic explanation</td>
<td>Very explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF without metalinguistic explanation</td>
<td>Explicit</td>
</tr>
</tbody>
</table>
The student participants also reflect the ELL subgroup classification group “Newcomer” as identified by NYSED. NYSED (2019e) distinguishes 6 subgroups within English Language Learners which demonstrates that ELLs are not a monolithic group, but rather, there is much diversity represented by ELLs in addition to home language and country of origin. Figure 4.9 is a reproduction of the 6 subgroup classifications and the corresponding description for each group as described in NYSED (2019).

**Figure 4.9**

*NYSED ELL subgroup classification with description*

<table>
<thead>
<tr>
<th>ELL Subgroups</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcomer ELL</td>
<td>Students who have been in our schools for three years or less and are Multilingual Learners/English Language Learners. Please note that this subgroup includes both secondary school Newcomers and US born kindergarten MLLs/ELLS.</td>
</tr>
<tr>
<td>Developing ELLs</td>
<td>Students who have received MLL/ELL services for 4 to 6 years.</td>
</tr>
<tr>
<td>Long-term ELLs</td>
<td>Students who have completed at least six years of MLL/ELL services in a New York State school and continue to require ELL services.</td>
</tr>
<tr>
<td>ELL Students with Disabilities</td>
<td>MLLs/ELLS who have an Individualized Education Plan (IEP). An IEP team determines a student’s eligibility for special education services and the language in which special education services are delivered.</td>
</tr>
<tr>
<td>Students with Interrupted Formal Education (SIFE)</td>
<td>MLLs/ELLS who have attended schools in the U.S. for less than twelve months and who, upon initial enrollment in schools, are two or more years below grade level in literacy in their home language and/or two or more years below grade level in math due to inconsistent or interrupted schooling prior to arrival in the U.S.</td>
</tr>
<tr>
<td>Former ELLs</td>
<td>A Former ELL is a student who was identified as a MLL/ELL and has met the criteria for exiting MLL/ELL status. Upon exiting MLL/ELL status, Former ELLs are entitled to receive at least two years of Former ELL services.</td>
</tr>
</tbody>
</table>

Based on the subgroup classification and English proficiency, the student participants have many factors in common. The three are classified as “Newcomer ELLs” having been in New York State schools for three years or less, in fact all three had
arrived to the U.S. between 1-3 years with Lissy and Babu arriving to the U.S. around the same time. All three student participants were classified as having an “intermediate” proficiency in English, with Lissy and Babu having Emerging proficiency (low intermediate) as per the 2019 NYSITELL, and Nyima with a Transitioning proficiency (intermediate) also per the 2019 NYSITELL. These students show to have some dependence on supports and structures and some independence to advance academic language skills. Even more so, Lissy and Babu share the same country of origin and state in Indian (first interviews), as well as the same home language, which is Malayalam (first interviews), and yet, the WCF they received across the three participants was different in WCF types, amount, and level of explicitness. This demonstrates that there is a need to account for additional learner factors that only qualitative case study can provide insight for in explaining the why.

Lissy and Babu are two students from similar backgrounds, both migrated from India a little over a year ago, spoke Malayalam as their first language, and both identified as having “emerging” proficiency level in English, they received different WCF as well as having differential responses to the WCF. This is reflected that proficiency levels in English are not the only individual factors that are in play as it relates to the teacher rending and student response to WCF, nor it is the sum of many other factors such as demographics, first language, country of origin, time in the country, as Lissy and Babu share many of these factors in common. So why is it that they received different WCF? In addition to aforementioned factors, as Ms. Vails pointed out during her first interview, students within the same proficiency level may have differential responses to the lessons and WCF provided. This is due to additional individual factors captured during the first
interviews. Babu received formal instruction in English in India prior to his arrival to the U.S., whereas Lissy started learning English when she arrived to the U.S. It can also be the level of social risk taking as Lissy is noted as having been shy while Babu is noted as charismatic. Many of these individual characteristics are not captured in any assessments, but rather, through interactions and relationship building with students.

In addition, as Ms. Vails pointed out, the WCF rendered is based on what students needs are based on what they actually produced in their writing. When she provided different types of WCF to different learners it is “because you’re always learning in steps and strategies” and she tailored her WCF “depending on how they’re writing. I’m always looking to take their writing to the next step. It really depends on what they write and how they can improve” (first interview). Table 4.3 contains the L2 morphosyntactic writing errors that were identified in the students’ diagnostic writing and the writing task.

Based on Table 4.3, we can notice the points of contact as well as points of departure of grammatical errors across the student participants. For example, in their writing diagnostic, all three students performed errors on grammatical tense. However, each for different reasons. There are consistencies in morphosyntactic errors from the September diagnostic writing samples (which did not receive WCF), and the Written Task in November (which was the first written task to receive WCF this semester). Babu’s errors included the missing particle “to” within his use of the infinitive. Lissy also performed this error with regards to the infinitive tense, but also, in her use of the present progressive following the phrase “I am going” where she wrote “I am going studying” versus “I am going to study.” Whereas Nyima’s tense error was on the exclusion of the suffix -ed when referring to actions taken in the past. Therefore, the
linguistic feature of the grammatical error must also be taken in account when providing WCF.

Table 4.3

Student L2 writing length (number of words and sentences) and grammatical errors

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>Diagnostic Writing</th>
<th>Written Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>51 words 8 sentences</td>
<td>42 words 3 sentences</td>
</tr>
<tr>
<td>Babu</td>
<td>118 words 10 sentences</td>
<td>140 words 11 sentences</td>
</tr>
<tr>
<td>Nyima</td>
<td>132 Words 5 sentences (run-ons)</td>
<td>221 words 10 sentences (run-ons)</td>
</tr>
</tbody>
</table>

**7 Grammatical Errors**
- 2 errors with grammatical tense- the infinitive tense (missing particle to and the use of the present progressive)
- 2 sentence fragments (verb missing (to be) and “drawing” by itself)
- 2 errors on grammatical number: 1 plural requiring singular and 1 singular requiring plural
- One error with the use of pronoun that should be deleted

**3 Grammatical Errors**
- 2 errors on missing definite article before the proper noun and superlative.
- 1 Sentence fragment with missing auxiliary verb in the question “Are you safe?”

**2 Grammatical Errors**
- 1 error with grammatical tense- the infinitive tense (missing particle to)
- Missing verb “is” in the dependent clause following the subordinating conjunction “because” within the complex sentence.

**6 Grammatical Errors**
- 2 errors with subject verb agreement
- 1 error with zero article with plural count nouns [How are the things going there?]
- 1 error of verb tense of “know” [to let you known that]
- 1 error of missing definite article with the proper noun “the Black Death” (not addressed in WCF)
- 1 error of missing subject noun within the sentence.

**11 Grammatical errors**
- 3 noun number, 2 plural -s & 1 plural -es
- 2 subject verb agreement “are” and “has”
- Possessive Pronoun misuse- “my”
- 2 missing object pronouns- “it”
- 1 preposition missing- “In”
- 1 verb tense, past tense -ed
- 1 missing “to be” verb, “is”

**20 grammatical errors:**
- 1 inverted verb and noun phrase
- 4 subject verb agreement “to be” & lasts
- 3 missing verbs “to be”
- 3 verb tense (including 2 -ed)
- 3 missing definite article before proper noun
- 6 noun number, plural -s
There were also consistencies and differences across student participant writing samples with regards to grammatical errors across individual student L2 writing tasks. Lissy performed in both the writing diagnostic as well as the writing task sentence fragments where either the verb or auxiliary verb is missing. In contrast, Babu wrote more words and sentences, and his sentences were complex through his use of compound sentences. His errors were more diverse between the diagnostic writing and writing task, which included subject-verb agreement, the English article system, missing verbs and missing subject nouns. Nyima wrote the most in terms of words and sentences, but also performed the most frequent and diverse of grammatical errors. Therefore, in combination with the student written work, proficiency level, years in the U.S., and ELL subgroup, these factors provide an overview of the language abilities of each student that prompted the teacher’s decision of which type of error to focus on and the type of WCF she would utilize for each student. Table 4.2 shows that each student received a different set of WCF types to account for the unique needs of each student. In addition to language abilities, the impact of WCF is also affected by teacher and student beliefs which is discussed further in the subtheme below.

**Teacher and Student Beliefs on WCF.** Decisions on which error to address with WCF, the type of WCF to use, and the interaction between students and WCF is also impacted by the factors of teachers and student beliefs on the practice. For the student participants, they were consistent in their beliefs that WCF is positive, a part of the teacher’s job, and it motivates them to write better (retrospective verbal reports). Lissy believes that the teacher’s feedback on grammar errors will help her the next time she uses those words and that it motivates her to write better the next time she uses them
(retrospective verbal report). She also stated it motivated her to write better next time (first interview). Babu also stated that when he received WCF he felt good and that he needs to know what his writing is either “good” or “bad,” which is what I believe he meant as accurate or not within his academic writing context. Nyima also felt that WCF makes her “feel better” because she now is aware of what needs to be addressed in future writing (last interview).

The teacher’s beliefs also impacted the WCF rendered as well as how the students perceived it. She believes that when providing feedback, it is important to start with something positive in order to avoid students to feel negativity towards feedback. Ms. Vails believes that by building connection with students, they will perceive the WCF in a good manner and will desire to do better for themselves and for the teacher. She also believes that because of her school experiences and the emphasis on writing on standardized examinations, she too must provide opportunities for students to be provided instruction and intervention as it relates to grammar in writing. She also believes that she must differentiate her WCF for students as they within different steps and stages that are dependent on the students’ English proficiency levels and what the students actually wrote in order for them to improve.

The COVID-19 pandemic has caused an abrupt shift to online platforms for writing, causing teachers and learners to shift from paper and pen to complete digital writing and rendering WCF digitally. Lissy, believed using the computer is more effective as the computer is able to indicate to her the grammar errors, and provides her with the correction (last interview). Babu believed that writing by hand was better as it helped him memorize better (first interview), but later stated that he prefers digital
writing and digital WCF because all of the materials are stored in one location where it can be accessed whenever WIFI is available (last interview). He explained that he doesn’t have to worrying about getting anything lost, finding it, or only accessing it physical within one particular time and space, such as the classroom during when class is in session. Nyima also believed that teachers explained and elaborated more within the digital space than they do when they are in person (first interview). However, she also believed later on that the learning is not of the same quality that you can get when the teacher is present to see your work as you complete it, touch the paper, and explain further onsite (last interview).

Ms. Vail’s belief aligns with Babu’s first impression of digital WCF in than handwritten is better as it provides a connection that makes it more memorable (first interview). She also believes that the WCF she provided digitally was not as different as she had provided prior to the pandemic in hand written form (last interview). The only main difference is that now she has the ability to keep the student’s writing untouched and only copy and paste the sections that she has chosen to provide WCF, a practice that she had never done prior (retrospective verbal report). If she was to have done this before through paper and pen, she would have to handwrite the students sentences, which is more time intensive.

Language ability in terms of English proficiency level, ELL category, years in the U.S. receiving ENL along with the beliefs of teachers and students reflect a set of factors, the individual factors, that have impacted the teacher’s WCF practices (RQ2) as well as the student responses to the WCF provided (RQ3) during the COVID-19 re-entry during the Fall 2020 semester and the shift to using digital tools for writing (RQ1). These
fingerprints left by the learners and teacher on the learning environment and each other informed the resources, interactions and exchanges that was afforded to learners as it relates to WCF. These set of individual factors has also influenced the WCF rendered, the WCF perceived and the use of the WCF during the revision task which will be discussed during the next set of themes reflecting the contextual factors that have also impacted WCF.

**Ecosystemic properties of WCF**

As Larsen-Freemen (2016) underscores, we in education are interested in the affordances in the environment that support learning opportunities. The researcher poses the question “what are the properties of the environment, natural or introduced, that affect some outcome?” (p. 4). First order affordances are those learning opportunities that have been designed by the teacher, properties of the environment that is managed by the teacher, and are located within the learning environment. These ecosystemic properties of WCF emerged as a major contextual theme from the coding of first order affordances observed and collected during data collection and reinforced further during case study analysis from an ecological perspective. An ecosystem is a biological community of interacting organisms and their physical environment. In second language development from an ecological perspective, the properties of WCF can be understood as possessing ecosystemic attributes that characterize the learning environment. The learner’s environment is a complex network or interconnected system that is comprised of contextual factors that influence learners’ interaction with WCF. It has become even more complex as a result of the pandemic and shift to remote learning as the ecosystem is
no longer bounded to physical proximately because of remote learning and advancements in telecommunication programs.

The technological advancements have expanded the ecosystem, allowing for interactions and exchanges within a virtual learning environment. This includes the amplification of properties in the environment that are identified, designed and managed by the teacher in rendering opportunities for language learning. These first order affordances also include physical attributes of the WCF, such as textual factors, which describes the characteristics of the WCF rendered (e.g. quantity, explicitness, and location on the learner’s writing). It also includes the instructional level factors, such as the instructional materials present, tools utilized, and access to resources. These contextual factors can be understood as affordances that the learning environment has rendered to the learner. Specifically, because these contextual factors are physical, they are the ecosystem’s first order affordances. Therefore, the ecosystemic properties of WCF are described in first order affordances which are reflected in the two subthemes below, the textual factors of WCF and instructional level factors of WCF.

**Textual Factors.** Ms. Vails provided her learners with first order affordances in many aspects, including PowerPoints, videos, Bitmoji classrooms, just to name a few. The actual WCF rendered to her students writing is also a first order affordance as it is a physical resource that the teacher has manipulated within the students’ learning environment in order for students to develop their grammatical accuracy within their L2 writing. Table 4.4 reflects the WCF provided to the student participants, including the type, frequency and level of explicitness.
Table 4.4
Textual Factors of WCF provided by type, frequency and explicitness

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>WCF types received</th>
<th>Frequency</th>
<th>Explicitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>Reformulation with options</td>
<td>2</td>
<td>Most explicit</td>
</tr>
<tr>
<td>Babu</td>
<td>Direct WCF with metalinguistic explanation</td>
<td>1</td>
<td>Very explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF without metalinguistic explanation</td>
<td>3</td>
<td>Explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF with examples</td>
<td>1</td>
<td>Less explicit</td>
</tr>
<tr>
<td>Nyima</td>
<td>Direct WCF with metalinguistic explanation</td>
<td>10</td>
<td>Very explicit</td>
</tr>
<tr>
<td></td>
<td>Direct WCF without metalinguistic explanation</td>
<td>5</td>
<td>Explicit</td>
</tr>
</tbody>
</table>

The magnitude of intervention should not be viewed solely by the frequency of the WCF, but also, by the level of explicitness. Lissy received the highest level of intervention as it relates to the level of explicitness within the WCF rendered. The teacher rewrote two of the student’s sentences that reflected sentences fragments, used the student’s words, and reworked it to become more target like within academic contexts. The teacher went a step farther that was has been captured in the literature and provided options in the reformulation, as either a statement or question, for the student to decide which she would prefer (as it was also unclear what the intention was due to the sentence fragment and lack of punctuation). This provided Lissy with the words and structures she needed to convey the same meeting she intended within academic English writing.

Babu and Nymia both received direct WCF with and without metalinguistic explanation which reflected explicit WCF practices, but is less explicit than reformation WCF. One example within Babu’s writing task was when he wrote “How is the things
going there” captured in figure 4.2. The teacher crossed out the use of the use of the
definite article “the” as well as the verb “is” to for subject-verb agreement. She also
provided the correction and wrote the verb “are” in red font next to the crossed-out verb
“is.” Ms. Vails then provides the metalinguistic explanation underneath regarding the
plural noun “things” that require the use of the verb “are.” However, she did not explain
the use of the zero article. Ms. Vails explained that she only provides a metalinguistic
explanation if she knows if only the learners will understand it (retrospective verbal
report), implying if the students have been taught at least by her the grammatical
terminology and rules. The metalinguistic explanation along with the direct WCF
represents a more explicit WCF than just direct WCF by itself, although Ms. Vails only
provided it if students have an understanding or background knowledge. Perhaps the
next step for the students writing development with subject-verb agreement errors would
be to provide indirect WCF, by having indicating the presence of the error, with the
metalinguistic explanation to prompt students to self-correct using their background
knowledge.

Babu did, however, received an additional type of WCF that neither Lissy and
Nyima received, which also reflects a less explicit WCF practice. Ms. Vails provided
direct WCF with examples. This practice represented the least explicit WCF practices
utilized. The direct WCF with examples was used for the subject verb agreement error
when Babu wrote “The symptoms of the disease is…” which is shown in Figure 4.3. The
teacher showed the location of the error using parenthesis in red but did not provide the
correction outright by just crossing out “is” and replacing it with “are.” Instead, she
provided examples with varying amounts of words in between the subject noun and the
verb to show, implicitly, that the verb is always modified by the subject noun and not necessarily by the closest noun to the verb. This WCF rendered was intended to positioned Babu to deduce the required correction by noticing for himself through the examples provided by the teacher (retrospective verbal report), providing an opportunity for the student to self-regulate and become more autonomous in their revision.

The above examples of WCF rendered represent first order affordances for the learner in using new structures and words consistent with the expectation of academic English writing as well as becoming more autonomous through self-correcting. The more explicit WCF are affordance in providing the student with new information whereas less explicit affordances provide opportunities to utilize their background knowledge to self-correct. The reformations and direct WCF represent more teacher assisted first order affordances to scaffold student learning through the provision of target form. While the direct WCF with examples positioned Babu to noticed the structure to prompt his correction, rather than just providing the correction outright. How Babu perceived the indirect WCF and ultimately corrected the error accurately reflects another set of affordances, referred to as second order affordances, which is discussed in the next theme. However, in addition to text level factors, instructional factors referenced at the beginning of this section are also first order affordances that is elaborated below.

**Instructional Factors.** Instructional factors surfaced as a subtheme due to the ubiquitous presence of the digital tools that were utilized during remote and hybrid learning that had also impacted the provision of WCF by the ENL teacher as well as the response to WCF by the learners. These included the learning platforms (e.g. Microsoft Teams), resources created by the teacher such as PowerPoints, the curriculum, and
interactions between the teachers and the students. In building equity and access for ELLs, the school provided laptops for Lissy and for Nyima, as Babu had his own laptop. However, computer access was just one aspect, as WIFI access and quality of WIFI was also a challenge as Lissy stated “before by going to school I was talking with my friends and answering the teacher’s questions. Now I have internet problems” (first interview). WIFI issues and access was not just one sided, as the schools and teachers also would experience WIFI outages where students were log on but teachers lost access to their students. This occurred frequently during the first month in September. The school experienced Internet outages while all students were home for remote learning and the teachers reported to the school. Therefore, lost instructional time may have resulted from lack Internet access.

As a result of the pandemic, the school shifted into using Microsoft Teams as the Learning Management System (LMS) where students logged unto for synchronous instruction using the telecommunication software, retrieved their course materials and assignments, uploaded their tasks, and viewed their gradebook on the assignments submitted. Babu is a completely remote student from September through December and he noted that the new digital tools were helpful as the applications made it easier due to not needing a web browser. With the downloaded application students did not have to constantly type in (and remember) their username and passwords in order to access their classes (first interview). As time passed, so did the userability of the digital tools as Babu stated that “in the beginning of the year was a little bit hard, but now it’s getting a little bit easier because now I know how to use the computer and Teams and stuff like that” (last interview). Babu’s digital literacy in navigating the digital tools has increased
through its consistent use throughout the semester. Lissy, Babu and Nyima discussed how they utilized dictionaries to look up words for spelling and meaning, specifically electronic dictionaries and Google (first interview). They stated it is much faster and easier using electronic dictionaries than paper-based ones. This was also confirmed by Ms. Vails who positioned students to use dictionaries and thesauruses to amplify vocabulary (first interview). The shift from paper-based dictionaries and thesauruses to electronic versions reflects the automization of learning tools to facilitate language development. These digital tools represent first order affordances.

The three student participants all agreed that Ms. Vails’ classes are fun due to how she engaged students with applications such as Bitmoji, PowerPoint and Jamboard. The teacher is able to create a virtual classroom that she can decorate, provide images of books or posters with hyperlinks to resources, creating a digital library as shown in Figure 4.6. Ms. Vails also used applications for students to interact with the content and with each other through programs such as NearPod and Jamboard. As Nyima stated “she makes her lessons fun the way she decorates and clicking and dragging. That’s one thing I love the most. She is the only teacher that uses Bitmojis” (last interview). The students felt engaged also because they expressed that the use of images, videos, and the click and drop also assisted them to comprehend the content and task better (first interview). Babu explains “she does use PowerPoints. Like we can know and are more able if you do PowerPoints” (first interview). With PowerPoints or any other slide-based application (e.g. Google slides), students are able to visually see what is being reference by the teacher through supports like images and text. As Nyima pointed out, digital tools helped student comprehend better especially when they do not understand the teacher’s
handwriting; “I feel like I understand [digital] more. I’m just not that good reading other people’s handwriting” (first interview). Thus, when student have access to a devise and the Internet, teachers can engage students through visuals, videos and applications that facilitate interaction as well as the use of digital texts can ensure that the handwriting does impede comprehension. These tools also have implications in how WCF was rendered.

The rendering of WCF has also been impacted by these digital tools for both learners and teachers. Because of the pandemic, the exchange of papers between students and teachers was prohibited for the safety and well-being of the school community in mitigating the spread of the coronavirus. As a result, all writing and feedback was completed digitally. Ms. Vails rendered WCF using the word processing tools to indicated corrections. For example, the teacher stated that she changed the color of the correction for mistakes. She actively chose the color red as she considered it “the color of correction” (last interview). The biggest change the teacher experienced was in providing the feedback digitally where she was able to keep the students writing untouched and parse out the sentences she identified for WCF by copying and pasting the targeted sentences on the bottom of the page with the feedback. The location is reflective of providing feedback in the margin of the page.

For all three students, Ms. Vails engaged in this processed, even for Nyima who handwrote her paper by using the screen shot and cropping tools. The teacher stated her reason to do this for two-fold, for students to compare their writing with the feedback, as well as honoring the students’ writing by not invading it with corrections. The digital tools help to facilitate this as the teacher stated she has never done this before and would
just provide the WCF on the student writing by circling and drawing arrows to the margin with the correction (last interview). This was further reinforced in her comparing her WCF of a subject-verb agreement error digitally versus on paper, “if this was on paper, I would cross out ‘is’ and I would cross out ‘the,’” I would do the insert and I would write ‘are”’ (last interview).

The first order affordances of textual factors and instructional factors discussed above reflect the physical contextual factors that have impacted WCF during the pandemic in the Fall 2020. They represent opportunities for engagement in rich contexts of use, differentiated instruction, and technology, all of which involved the manipulation of physical properties in the environment. The teacher manipulated the resources to tailor the affordances based on the individual factors for each student (i.e. textual factors) as well as curate resources and materials such as videos, Bitmoji classroom hyperlinks, and electronic dictionaries (i.e. instructional factors) in the development of the learning environment. These learning ecosystemic properties are just one part of the ecosystem. It is crucial to include the learner’s perceptions and actions taken towards the first order affordances being provided to them as part of their language learning development. In other words, students must be able to perceive these resources, find value in them, and ultimately used them. This speaks to the next theme that surfaced from the data which reflects the second order affordances.

*Symbiosis between the Learner and WCF*

In contrast to first order affordances, second offer affordances depend not on the properties in the learning environment, but instead on the relationship between the properties and the perceptive and active learner (Larsen-Freeman, 2016). In addition to
the physical or first order affordances the environment renders, the ecosystem is also comprised of the symbiotic relationships between the learner and their environment. Symbiosis is the interaction between two different organisms living in close physical association, typically to the advantage of both. From an ecological perspective in language learning development, affordances emerge when aspects of the environment are in interaction with the learner (Gibson, 1979). Therefore, the learner’s perception of, and active relationship with the ecosystemic properties afforded to them is critical to second language development. Within the coding of data, the distinction is made between first order and second order affordances through a shift from a property-centered focus to a relational one. For example, the WCF rendered by Ms. Vails, which was captured in Figures 4.1-4.5, are ecosystemic properties. The students’ perception and response to the WCF reflects the symbiosis (or lack thereof) between the two, which will be explored within this theme.

The symbiotic relationship can be described in the interactional and interpersonal factors that the environment has afforded. Specifically, these interactional and interpersonal factors are known as second order affordances as it reflects the opportunities for interaction and relationship building, rather than the physical or first order affordances. As students interact and build relationships with the instructional and textual factors of their learning environment, this will better inform the teacher of what is useful to, and needed by, the learners. For example, when Ms. Vails rendered WCF on their writings, the students perceived the WCF, saw value of the WCF to assist them in their L2 writing development, and applied the correction within a subsequent revision or later writing assignment reflects both the interactional and relational aspects between the
student and the WCF. The students’ response informs the teacher of subsequent opportunities the students require for their development. Therefore, these second order affordances (interaction & interpersonal relationships) portray a second set of contextual factors that mediate learners' response to WCF within second language development. The exchanges between the students’ writing, teacher’s feedback and students’ revision reflects the learning for both the students and teacher on what is needed to progress the students’ L2 development. The data captured on the symbiotic relationship within the second order affordances is described in the two sub themes below: Interactional Level Factors and Interpersonal Level Factors

**Interactional Level Factors.** Lissy, Babu and Nyima received their written tasks with the teacher’s WCF digitally on Microsoft Teams where all the students' assignments and scores are stored. All students in the class were given the opportunity to complete a revision in order to increase their score on the writing assignment. Ms. Vails was doubtful that students in general would refer back to their writing tasks and review the WCF rendered independently, so she incentivized students in order to continue their writing development: “If students actually went back and revise their writing based on the feedback, I provide them with some sort of extra credit or something like that to just always improve on their writing” (first interview). The three student participants took action, revised their writing task with the WCF the teacher provided, and submitted their revision task. Note that the revision task was optional and had to be completed outside of the class time. This is an example of a second order affordance, where Ms. Vails is managing the relationship and interaction between the learners and the affordance being provided, the WCF. With this opportunity, students were prompted to the
morphosyntactic errors that was present in their writing with the WCF reflecting varying levels of explicitness for correction during their redraft as depicted in table 4.4.

This is also representative of the impact of the pandemic, as Lissy and Babu engaged in the writing, feedback and revision process completely virtually. Nyima, the only student participant that opted for hybrid learning from October-December, engaged in a hybrid writing process, where she wrote the letter by hand and took a picture of it to submit, the teacher provided feedback by taking screen shots of the picture unto a Word documents, and Nyima revised her draft by hand again but using the digital feedback to guide her. The final draft serves as evidence for interaction as the students perceived the WCF, found value in its use, and incorporated it into their revision. Table 4.5 captures the interactions between the students' perception of the WCF and its utilization during the redraft. The coding completed was adapted from Han (2019) that included correct revision, incorrect revision, no revision, deletions, substitutions, and no revisions. In addition to this coding additional codes were included such as correction grammatical revisions without teacher’s WCF, where students self-corrected without the teachers WCF, and grammatical errors that remained and did not receive WCF. Table 4.5 below provides the summary of these interactions.

Interaction occurred across all three students at varying extents. Lissy, who received reformations with options, chose the option she desired (statement or question) and incorporated it into her revision. This addressed the sentence fragment and definite article errors she experienced in her L2 academic writing. This also represented that most scaffolded intervention due to the high level of explicitness provided. Babu perceived and acted on his WCF and revised his grammatical errors accordingly.
However, the perception and action talked to the least explicit WCF rendered to him, which was direct WCF with examples for the subject-verb agreement, did not align with Ms. Vails’ intention.

**Table 4.5**

Summary of the interactions within the writing process and WCF

<table>
<thead>
<tr>
<th>Student Participant</th>
<th>Writing Task Errors</th>
<th>WCF Type</th>
<th>Revision Task Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lissy</td>
<td>3 grammatical errors</td>
<td>Reformulation</td>
<td>2 correct revisions</td>
</tr>
<tr>
<td></td>
<td>• 2 missing definite articles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 missing verb within sentence fragment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Babu</td>
<td>5 grammatical errors</td>
<td>Direct WCF with &amp; without explanation</td>
<td>5 correct revisions</td>
</tr>
<tr>
<td></td>
<td>• 2 subject-verb agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 zero article</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 verb tense</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 missing subject noun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nyima</td>
<td>20 grammatical errors</td>
<td>Direct WCF with &amp; without explanation</td>
<td>12 Correct Revisions</td>
</tr>
<tr>
<td></td>
<td>• 1 inverted verb and noun phrase</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 subject verb agreement “to be” &amp; lasts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 missing verbs “to be”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 verb tense (including 2 -ed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 missing definite article before proper noun</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 6 noun number, plural -s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct WCF with &amp; without explanation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 verb tense (including 1 -ed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 inverted verb and noun phrase</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 noun number, plural -s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 subject verb agreement “to be”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 definite articles “the”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 missing verb “to be”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 No Revision Grammatical errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 Subject-Verb Agreement “To be” which was not revised</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 noun number, plural -s (2 not revised and 1 not provided WCF). However, student corrected 3 that had WCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Correct grammatical revision without teacher’s WCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 verb tense -ed (infected).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 grammar errors remaining outside of teacher’s WCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 missing verb “to be”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 missing definite article “the” before proper noun</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 subject verb agreement “last”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 plural -s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During Babu’s retrospective verbal report, as we reviewed figure 4.3 together, Babu stated that when he first saw the parenthesis over “is changed and” he thought to himself that he was to include the parenthesis in his revision; “I thought I had to put in the brackets on those words.” Later, when he saw the examples within the bullet points he stated “These are different ways to write it.” Babu stated he chose the second one and ultimately, he corrected the subject-verb agreement error, but not in the way Ms. Vails intended for. This exemplifies how affordances must not only be perceived, but there can be differentiate perceptions and interactions with what was afforded and intended to be.

Nyima wrote the most in terms of words and sentences and as a result, also contain the most grammatical errors across the participants. In addition, her revision also contained the most correct revisions. However, here we see more diversity in the perception and interaction with the WCF. In addition to the correct revisions, Nyima also had no revisions, where she did not provide corrections to the WCF that was provided. However, she did also perform a correction on a grammatical error that Ms. Vails did not address in her WCF. During her retrospective verbal report, Nyima explained when pointing out the items that were not revised, she was surprised that she did not revise them and stated that it was due to her rushing while revising that she missed those errors with WCF. When we discussed the error, she did correct with no WCF, she stated that she was surprise on some of the errors she made and that she received WCF, that she could correct them by herself when she is not rushing. This is also reflective on how second order affordances are provided that impacts the integrity of the effective WCF can have.
Ms. Vails manages the interaction space by providing the opportunity for students to complete the revision independently outside of class for extra credit and it is optional. Perhaps if the revision was not optional but part of the exception to complete during class time, students like Nyima would not feel the need to rush due to other responsibilities at the home, especially since Nyima reports on-site for two days a week. Ms. Vails also noted that this past semester has taught her that for students to really “look at” the WCF and use it, she will have to have students write during class time to also guide them more as many students did not complete the revision option for a better grade. All three student participants did, which speaks to another set of contextual factors within the symbiosis between the learner and WCF, the interpersonal level factors.

**Interpersonal Level Factors.** As mentioned above, all three student participants completed the revision tasks assignment while many of their classmates did not. This speaks to the interpersonal relationships between the learners, their teacher, and the researcher. As Ms. Vails pointed out, when you build relationships and connections with your students, they will take feedback in a good manner and will want to do better, not just for themselves, but even for you (final interview). Two of the participants, Babu and Nyima, had Ms. Vails last year and expressed that they like her and her class because it is fun and she helps them a lot compared to other teachers. Lissy also stated that she likes Ms. Vails and feels confident whenever Ms. Vails gives her feedback that she will do better. The fact that the students even wanted to participate in the study with no monetary or grade incentive is a testament to their commitment to their development, as it was communicated to them the study was to better understand how to provide ELLs...
with feedback on writing, as well as their commitment to Ms. Vails who also volunteered in the study.

The interpersonal relationships also extended to include me as well. When Nyima submitted photos of her writing task, within the photo you are able to see drafts in the background. In addition, Ms. Vails stated that when she made a mistake, Nyima told Ms. Vails that she had rewritten multiple times in order to impress me, the researcher. Therefore, in addition to the first order affordances and the space and time we provide students to interact with the WCF, relationship building is critical to the L2 writing development process, including WCF so that students know it is meant to continue development and viewed as negative, but rather, an opportunity to improve. In fact, all three participants indicated that WCF provided will help them write better the next time (final interview).

These interpersonal relationships reflect the contextual factors that shape the ELLs’ response to the feedback provided. Even with the shift into hybrid and remote learning, building relationships is vital and difficult to accomplish through a computer screen and while maintaining social distancing due to the pandemic. Yet, Ms. Vails was able to effectively accomplish positive relationship building with the student participants through her use of engaging media (e.g. Bitmojis, interactive programs), as well as providing the support that Lissy, Babu and Nyima feel has been substantially more than their other teachers. This reflects a shift in practices, where Ms. Vails had to quickly adapt her practices, including the rendering of WCF. This is captured in the next and final theme below.
Adaptations in WCF practices and perspectives during an ecological disaster

The COVID-19 pandemic is an ecological disaster and has disrupted the ecological system for learners in many ways worldwide. Aside from the traumatic experiences of losing loved ones, the societal fear of the unknown, and abrupt school closures, student learning experiences had to quickly adapt to ensure continuity of learning. The pandemic has impacted learning and created the catalysts for the shifts in practices and perspectives, including WCF, causing an evolution of technology integration in learning as a result. An adaptation is a change or the process of change by which an organism or species becomes better suited to its environment. In using the ecological metaphor of adaptation, Larsen-Freemen’s (2016) explanation of adaptation resonates especially now during the pandemic. She argues that it is our responsibility to help learners relate to the language environment, to help them cope with the massive amount of change that is transpiring in today’s world, or at least that part of the change that has to do with enacting their language resources.

Ms. Vails provided the affordances necessary for students to adapt their writing process using digital tools during the pandemic, which reflects the shifting of practices and perspectives. This notion of adaptation reflects the shifts that has occurred in the teaching strategies and digital tools utilized to meet students’ needs as well as accounting for the ecological disruption caused by the pandemic. Learners and teachers had to quickly adapt to the abrupt changes in their environment. As noted above, the changes in first order and second order affordances positioned learners to experience shifts in both WCF practices as well as perspectives from both students and teachers. These two subthemes will be discussed below.
**Shifts in WCF practices.** As a result of the pandemic, the use of digital tools has expanded the learning environment beyond physical proximity constraints, this includes the practices of rendering WCF. All exchanges on L2 writing occurred through a digital environment, where students and the teacher are connected regardless of where they may be. The use of digital tools enabled Ms. Vails to rendered WCF in a way that she had never done previously (retrospective verbal report). She noted that “If this was an assignment in which was on paper in class that I would underline or I would circle and then draw a line on another part on the paper, not inside the writing, but in the margin below or above with suggestions” (last interview). This reflects Ms. Vails’ desire to leave the students’ writing untouched as much as possible; however, because of the nature of the pen and paper, there were times where she had to mark up the students writing for time efficiency. She stated on paper she would put a little insert on the student’s writing and write the word if a word was missing and if a word needed to be omitted, she would cross it out with a single line (final interview). This reflects a more evasive WCF practice as Ms. Vails would mark on the student’s writing directly. In comparison, because of the shift of remote learning and the use of digital tools, instead of marking on what the students typed, she parsed out the sentences identified by copying and pasting it below the students writing to render WCF. The time efficiency of the copy and paste allowed Ms. Vails to accomplish what she has always intended in leaving the student’s writing unmark. In order to do this with paper and pen, she would have to rewrite the student’s sentences which is not feasible when correcting every student’s written work.

In addition to the shift in practices from paper to computer, Ms. Vails also explained the shifts in practices within computer based WCF practices. In using digital
tools to render WCF such as comment boxes, track changes, crossing out, etc., when used in this way directly on the student’s written work online it can be detrimental to students’ L2 writing development; “I just feel that online when you see it, it looks like a lot. It looks like a lot of red. And almost like oh my gosh, I did so, you know, I just did a really bad job, you know, and I don’t want them to be turned off from writing. I’m trying to create a safe environment for them to take risks in the writing” (retrospective verbal report). Therefore Ms. Vails also experienced a shift within computer based WCF practices. The digital functions of edits and comment boxes that would mimic how she used to do it on paper and pen made it look like too many mistakes on the computer screen, and she shifted to leaving the student writing completely untouched and just copied and pasted specific sections that Ms. Vails identified has requiring WCF. This was a new practice this year as a result of COVID and shifting to digital platforms. “For digital this is brand new for me” leaving the student’s text completely untouched (last interview).

Lissy, Babu and Nyima also experienced changes in WCF practices, specifically with automated WCF. Lissy stated she preferred writing on the computer because the computer let her know spelling and grammar mistakes as she wrote and provided her with the correct forms when she clicked on it (last interview). Babu also stated at the end of the study that he preferred writing on the computer because of the autocorrect function (last interview). This reflects a second set of WCF that students are interacting with, one that is provided as they write. This WCF has been automatized in addition to the delayed WCF rendered by the teacher after the students completed the writing task and submitted it. This shift is captured in comparison to Nyima’s statement that in person writing is
better as the teacher can provide feedback as you write in class (final interview).

Nyima’s engagement with WCF has also shifted where she saw photo clips of her written work and the feedback below each photo clip with targeted sentences for correction. Nyima has never experienced this before but wanted the teacher to continue providing this to her as she will continue to hand write her written tasks. The provision of these options to students, handwriting or typing their written tasks, is an excellent way in providing student choice and building equity for our English Language Learners.

**Shifts in WCF perspectives.** Although not capture during the course of the study, Ms. Vails indicated that a lesson learned during the Fall 2020 semester is the importance of giving class time for writing assignments, including revisions, instead of assigning writing tasks for home work (last interview). Ms. Vails plans to provide class time for writing and revision tasks in the Spring semester as she noted that students were not looking at her feedback unless they do the revision, which is optional. This reflects the need of not just providing the WCF, a first order affordance, but also, the managing of how student interact and engage with it, a second order affordance. She also discussed facilitating one-on-one conferences to ensure students understood the feedback and to ensure they at least look at it. This shift in perspective in incentivizing her students to complete the revisions for extra credit to allotting class time for writing and revision was critical. Originally Ms. Vails indicated that class time should be for learning and to save time, students can complete the writing independently at home (first interview).

However, her suspicion that students wouldn’t review the feedback became a reality and so she shifted her perspective on this, stating that the writing process is important too and decided on providing class time for both drafting and revision to ensure students review
the WCF rendered (last interview). Although the 3 students participants did complete the revision, Ms. Vails admitted that the majority of the class did not. This suggests that the 3 student participants were highly motivated, perhaps in part due to their participation in this study.

Ms. Vails also experienced a shift in WCF perspective as a result of her participation in the study. During the course of the retrospective verbal report on her WCF rendered for Lissy, Babu and Nyima, I asked questions regarding the differences in explicitness in her WCF. Ms. Vails did not think about the levels of explicitness from the various WCF; “You’re making me think. I didn’t think about this before” (retrospective verbal report). Although Ms. Vails systematically adjusted the level of explicitness based on the WCF type she chose, the grammatical error she targeted, and the background knowledge of the students, she provided varying levels of explicit WCF intuitively that she developed from experience. Perhaps with this new understanding, this would assist Ms. Vails be cognizant of the shift from explicit to more implicit WCF practices in order to assist students to self-regulate within their L2 writing development. In the following section, a discussion on the themes as one will be provided in seeing the learning environment from a bird’s eye view.

Looking at the big[ger] picture: A synthesis of themes

As one may notice, the learning environment is complex and dynamic, filled with ecosystemic properties, symbiotic relationships, and adaptations due to the ecological changes. Individuals, such as learners and teachers, are also complex and dynamic, with differential responses to the learning environment. As individuals come into contact with the learning environment, interact with it and build relationships with it, that is where
learning develops. The individual fingerprints or factors cause differential responses to the affordances the environment provides. Individual factors such as beliefs and language abilities will perceive the ecosystemic properties differently and will interact with it based on those perceptions. The interactions are symbiotic relationships, as both the learner and the learning environment inform each other of what the needs are in moving the learning forward. In the case of WCF, the writing production informs the WCF types needed, the WCF rendered informs the learner of what changes need to be made in their subsequent writing, and the subsequent writing informs the efficacy of the WCF rendered in deciding what WCF type to use next.

The learning landscape is changing, as captured across the themes and subthemes discussed above. Changes within one factor cause a ripple effect across the other factors, causing teachers to adapt the affordances for ELLs and WCF. The COVID-19 pandemic has caused disruption across every single factor from the individual factors to the contextual factors, causing the learning environment to adapt and provide innovative affordances, such as leaving the student’s writing untouched while providing WCF. These adaptations were implemented quickly in order to protect the well-being and health of students and teachers. This included the changes needed in addressing ELLs’ L2 writing development. WCF has to be done without any physical exchanges, without any prior training for both students and teachers, and was learned as they engaged with the tools together through the semester. However, the perseverance of Ms. Vails, Lissy, Babu and Nyima reflect above indicated that L2 writing development is possible during hybrid and remote learning. It also reflected the evolution of WCF practices that were
unable to be completed by hand (automated WCF, parsing out student sentences for WCF through copying and pasting, etc.).

The metaphor of learners within an ecosystem provides a holistic understanding of the learning process as it occurs not only in the brain, but with the surrounding properties and social interactions that is taking place. This reinforces the sociocultural theoretical understanding that learning is a social process where knowledge is co-constructed between the learner and the more knowledgeable other. WCF can be understood as the co-construction of morphosyntactic development between the teacher and the student where both are actively engaged through writing. For WCF to have any effect, the student must perceive the information being rendered and act upon it. The action takes place as students read the WCF and use it during their revision or subsequent writing. Therefore, morphosyntactic development in L2 writing requires action from the student, subsuming structure and function.

With the Sociocultural Theory (SCT) construct of the Zone of Proximal Development (ZPD), the varying levels of explicitness of the WCF reflects the range between what the student is able to do with scaffolding (other-regulatory) to what students are able to do by themselves (self-regulatory). The less explicit the WCF, the more students are moving towards self-regulation and become more independent in developing their morphosyntactic accuracy within their L2 writing. This movement is captured in the changes in WCF types rendered to students. The WCF type chosen must be based on their knowledge of the grammatical feature, background knowledge, and experience. The differential response of Lissy, Babu and Nyima to the WCF provided as
well as the intentions of Ms. Vails has also impacted my positionality as a result of this study. This will be discussed further in the following section.

**Reflexivity**

Having gone through a systematic study during the Fall 2020 as a researcher and engaging in the process of writing the dissertation as led to shifts in my positionality to include a new role, that of a researcher. As I engaged in the case study development of Ms. Vails, Lissy, Babu and Nyima, I became intrigued with the depth of each individual case study. I would have written an entire case study on each one separately and would have still found the richness of data as it related to WCF individual and contextual factors using an ecological perspective of sociocultural theory. After I completed the data collection in December and engaged in data analysis, I developed a new sense of intrigued a wonder with case studies and have I have grown to appreciate the depth rather than the breath of intercase data collection and analysis.

In addition, I experienced a shift in my understanding as a result of the study from an ecological perspective. Just as the participants experienced differential responses to the affordances rendered, this applies also to me, the researcher, based on my own individual factors and my responses to the affordances made available to me (e.g. data collection) during the course of the study. Other researchers may have different interactions and perceptions on the data collected and this is why it is important to share in detail, to the extent possible, the methodology and evidence so that others can understand your response while developing their own.

As an administrator and educator of second language development within the K-12 sector, I was surprised on how much little writing students perform within an extended
writing tasks that would receive WCF. In fact, the writing task referenced in this study was the only extended writing task that received WCF and the option for revision in developing the writing process from September through December. Perhaps this was the result of the pandemic; however, with just one writing tasks in four months, students need more opportunities for writing beyond journaling and note taking.

The study has also reinforced my understanding that many of nuances in WCF provisions is done intuitively by K-12 educators. Many educators and learners are able to describe the WCF rendered/received, they can also discuss their beliefs and preferences of WCF; however, none of the participants conceptualized the WCF types as separate, with varying levels of explicitness, but rather, as just one act of WCF overall. This revealed to me why the majority of studies are completed at the higher education contexts as the knowledge of WCF literature and practices are studied and applied mostly by those at the professoriate level. Never the less, Ms. Vails WCF rendering aligned with the SCT framework as it relates to the ZPD just based on her experience alone. This position me to realize the need for writing course within K-12 teacher preparation programs including the role of feedback, specifically WCF, as well as the need for ongoing professional develop as it relates to L2 writing development and feedback. This would assist teachers to become cognizant of the levels of explicitness with the goal of lessen such scaffolds in building learner autonomy in writing.

My desired outcomes of this study were to capture the changes of the WCF during the Fall 2020 school reentry during the pandemic. Specifically, I wanted to know the impact of new digital tools in the rendering of WCF, and how individual and contextual factors impacted the rendering of and response to the WCF. I also wanted to add to the
extent literature on WCF from an ecological perspective in SCT in providing cases studies within the urban K-12 ENL setting within the U.S. Overall the impact of new digital tools provided equity and access to ELLs in developing their morphosyntactic accuracy for those who were completely remote (RQ1). The automization of the tools also provided remote learners with additionally WCF that was instantaneous was they wrote. The digital tools also made it possible for the teacher to provide WCF in a way she never has done before by leaving the students’ original writing untouched while she parsed out the targeted sentences that she provided WCF for. This allowed for a less evasive WCF practice as well as positioning students to compare their original written work with the sentences that have WCF.

The data collected helped me meet the desired outcomes and responses to the main research questions (RQ1) as well as the four subquestions (RQ2-5) The nature of the WCF provided to ELLs fall within an understanding of an ecological learning landscape. One that includes a digital space. This is portrayed with WCF that was rendered digitally that included text enhancements such as different color fonts, bolded texts, and highlights, as well has comprising of different types of WCF with vary degrees of explicitness (RQ4). The WCF was shaped by individual factors such as language abilities and student and teacher beliefs (RQ2). The response to the WCF was shaped by contextual factors such as the first order and second order affordances that was provided by ecosystemic properties and symbiosis (RQ3). The effect the WCF had on ELLs on their writing during the pandemic included adaptations in how students interacted with the WCF; nonetheless they were able to enhance the morphosyntactic accuracy within their revision as captured in table 4.5 (RQ5).
As a result of the study, implications from the data has prompted further empirical questions for subsequent research. In addition, the research questions and themes have reinforced the tenets within SCT and contribute to the WCF canon. This will be elaborated on along with ideas for the next research project and praxis within classrooms in the subsequent chapter.
CHAPTER 5
Implications

Research Questions, Themes and Discoveries

This study was in response to the novel coronavirus which disrupted education systems worldwide and an understanding of the impact and shifts in practice, especially for English Language Learners, is critical in ensuring equity and access to a group that has already experienced opportunity gaps (Jenson 2017) as well has been disproportionately impacted by the pandemic (Kim, 2020, Dec.). New York State schools and school districts took the learning from the abrupt shift into remote learning during the Spring of 2020 and to form a plan over the summer for the Fall 2020 re-entry, where schools would offer hybrid options where students would be able to come in for on-site learning while maintaining social distancing, along with complete remote options. This study sought to determine the impact of the new mediating digital tools on the provision of the ubiquitous practice in second language (L2) writing development, Written Corrective Feedback (WCF), within a K-12 setting.

The central research question, “What is the impact of new mediating tools (i.e. technology) on the provision of and response to WCF during the COVID-19 school re-entry during the Fall 2020 semester within high school ENL courses?” served as the helm in the exploration of these unchartered waters in education. Based on the findings in Chapter 4, the impact that new mediating tools, such as the Learning Management Systems, had for students is that it provided an opportunity for the continuity for learning. For L2 writing development, digital tools provided ELLs in their ENL courses with access to engage in their L2 writing development within a safe space for teachers and students to interact, exchange and co-construct knowledge through writing during the
The research subquestions served as the telescopes, at varying lengths, during the exploration. The subquestions included:

2. What individual and contextual factors shape ENL teachers’ feedback practices?

3. What individual and contextual factors shape ELLs’ responses to the feedback provided?

4. What is the nature of WCF provided to ELLs on their writing during the pandemic?

5. What effect does the WCF rendered have on the ELLs’ L2 writing development?

These questions provided the focus to hone in on the individual participants, the factors that surround them within their learning environment as well as their individual beliefs and perspectives. It also provided focus on the actual writing produced by students, the feedback rendered by the ENL teacher, and the interaction and effect that took place as suggested in the revisions. The individual and contextual factors that shaped the ENL
teachers feedback practices included the teacher’s views, opinions an conceptualizations about WCF, the students involved as well as herself. For Ms. Vails, she found WCF important as other teachers do not provide it for ELLs, she believes grammar is important, and provides it based on student factors such as proficiency levels, students’ background knowledge, and is responses to what student actually produced in their writing. For the ELL students, the individual and contextual factors that shaped their responses to the feedback included their views, opinions and conceptualizations about the WCF, the teacher and themselves. In addition, the types of WCF provided, the level of explicitness, and intrapersonal and international factors affected student response to the feedback as demonstrated in the revisions, the retrospective verbal reports, and final interviews. Students felt the WCF was helpful, well intention by the teacher due to their positive relationship with her, and will help them develop their writing in the future.

They did not always perceive the WCF if they rushed when the revision task was assigned for homework. The shift to digital tools and practices provided access and limited access at the same time. Students appreciate having all their notes, assignments, and feedback in one central location that can be access anywhere and anytime without having to go digging through papers and waiting to return to class in order to receive the feedback. However, when the Internet went down, so did this access.

The nature and the effect of the WCF provided is explained through the Sociocultural Theory (SCT) framework and the ecological perspective, which served as the lens within the telescope (subquestions) in the study of the individual and contextual factors that shaped the WCF during the Fall 2020 semester. Because each individual represents a unique set of characteristic and interactions with the learning environment, a
case study approach was utilized to capture each participant as a case for intra and inter case analysis. Each case reflects the learner’s Zone of Proximal Development, and the nature of the WCF mirrored the scaffold required at the moment of time for the student to development their L2 writing. The varying levels of explicitness across the scaffolds reflects the nature of the WCF types, providing a range of learner assisted or self-regulated supports. Students with lower proficiencies and background knowledge received more explicit WCF, whereas students with higher proficiencies and background knowledge receive less explicit WCF. The effect is based on students perceiving and interacting with the WCF through the successful incorporate of the feedback within the revision. The analysis of the factors, nature and effects of WCF surfaced themes that aligned to the ecological perspective in language learning that provides a coherent understanding of what happened and the implications for what is to come as it relates to WCF.

The understanding of the themes that emerged provided the compass and map during this exploration and for future directions of L2 writing development in general, and with WCF in specific. The themes of ecosystemic properties and symbiosis, affordances, or the opportunities provided to students, can be understood as both physical and nonphysical scaffolds. Second order affordances are dynamic, adaptive and contingent that considers not only the properties of the environment, but the learner’s relational stance towards them (Larsen-Freeman, 2016). Therefore, the charge on teachers includes the design and management of the properties of the environment (first order affordances), and the managing of the relationships between the students and the environment (second order affordances). This was observed and investigated as Ms.
Vails rendered WCF and managed the interactions and relationships students have with the WCF by having students complete the revision independently at home through incentivization.

**Provision of written interaction as equity building for ELLs**

The symbiosis between the learner and WCF can be understood as the mutually beneficial relationship between the learner and their environment. As the learners engages in writing, it informs the teacher of the type of WCF needed by the learner, and as the learners utilized the WCF to inform their revision, it also informs the teacher of the efficacy of the WCF rendered when the revision is reviewed. This, in turn, informs subsequent feedback types in future writing. Therefore, the implications include teachers to notice the types of WCF they are using with particular students, see if it is working, and adjust as needed based on what students are producing in their writing. The data shows that Ms. Vails considered multiple factors (individual and contextual) when she provided WCF, the type of WCF and corresponding level of explicitness also matched the proficiency level and needs for the students, but she employed WCF types intuitively. This puts into question if the teacher considered lessening the amount of explicitness in her WCF as her students progresses, which is an opportunity to engage in future research with the same teacher and students as they increase in proficiency level, or with other ENL high school teachers who provided WCF to ELLs with higher proficiencies (i.e. Expanding proficiency).

The themes of learner fingerprints, ecosystemic prosperities of WCF, symbiosis between the learner and WCF, and adaptations in WCF practices and perspectives emerged from and are inspired by the ecological perspective. The themes and supporting
data reinforce the SCT theoretical stance that learning is socially mediated and occurs through interaction. With WCF, interaction between the learner and teacher occurs through the writing and reading, from the first draft, to the rendering of WCF, revising the draft with the WCF, and by reading the revised version. The last step in the interaction, reading the revised version, informs the teacher how to adjust the WCF for subsequent writing assignment feedback. This process reflects how learning is captured and L2 writing development can be monitored and scaffolded.

Unlike cognitivist theories in second language acquisition that is primarily concerned with what occurs in the brain, the themes portray the bigger picture and the constructivist notion that learning occurs through processes in the brain of the individual as well as within the interactions within the nested ecosystems as reflected in Brofenbrenner’s Bioecological Model as depicted in diagram 1.4. In other words, for second language learning to occur, knowledge and understanding is co-constructed and is culturally and socially situated. As described above, the shear act of engaging with WCF reflects the co-construction of knowledge between the learner and the teacher. The provision of such opportunities for interaction in L2 writing development is critical in building the equity and access to our English Language Learners. Therefore, writing tasks that are appropriate to receive WCF should be rendered often.

In the study, it was observed that this type of written interaction occurred only once within a four-month time span. Although it appears students wrote every day during the four months, the vast majority of the writing the students engaged in does not afford the writing interaction that WCF provides. Writing tasks such as journaling has it values for students to develop their writing skills and provide a space for students to
engage in reflection and free write, but it is inappropriate to provide WCF. Likewise, students who are writing down notes and filling out graphic organizers reflect writing tasks that should also not receive WCF. Writing tasks such as letter writing and essays should provide opportunities to engage in multiple drafts and editing through the assistance of WCF. Therefore, having students write without providing WCF reflects a lack of interaction for morphosyntactic development. However, it is important to acknowledge that writing in general, and rendering WCF in specific, is very time consuming and providing weekly or biweekly WCF is not feasible, especially with large classroom populations. Nevertheless, we should maximize the amount of opportunities for ELLs to engage in this level of written interaction through WCF, including during class time, as concluded by Ms. Vails.

_Learners as organic and not mechanic_

The themes also address Larsen-Freeman’s (2016) shifting metaphors from computer input to ecological affordances to adaptation. Larsen-Freeman (2016) captures the shifting understanding of the field of Second Language Acquisition (SLA), where she herself admitted to utilizing technological concepts such as input and output back in 2008. Researchers under this paradigm viewed input or ambient language as the raw materials and driving force in second language acquisition which would lead to output, or the learners’ production of the language. This understanding does not account for how we co-construct meaning through social interaction. The shift from a computer metaphor to an ecological one reflects our understanding of being interconnected with others, with technological innovations, with the environment, and the increasingly transnational lives that many are living. This is demonstrated with Lissy, Babu and Nyima with their
experiences as Newcomer ELLs and the relationships they have built with the teacher, the new digital tools, and the WCF during the writing process all during a time of a pandemic. Cognitive theories alone are not sufficient in capturing their language development process with such complex external influences, as it concerns itself mainly with the property of language. As we know the first order affordances by itself does not lead to language learning, it must include the relationship and interaction as portrayed in the symbiotic relationships between the learner and the learning environment where the learner is socially and culturally situated.

Input and output also do not capture the active participation of the three learners engaged with the WCF and the adaptations that took place as a result of the pandemic. Therefore, the terminology of second language learning should be shifted from “Second Language Acquisition” to “Second Language Development.” The term “Acquisition” positions the learner as a passive recipient of input or exposure to ambient language. While “Development” within an ecological perspective proposes the learner to be actively engaged through symbiotic relationships. This also has strong implications for me as I serve as the Director of Language Acquisition. I do not desire to direct schools and faculty to position language learners as passive recipients of language, but rather, as active participants in the co-construction of knowledge process. A request for change in title from Director of Language Acquisition to Director of Multilingual Learners and World Languages will accompany the presentation of the findings to district administrators.

Lastly, as reflected in Bronfenbrenner’s (1979, 1993) Ecological Model, learners are nested within multiple subsystems of influence from the microsystem (e.g. family,
school, religion) to the exosystem (e.g. local politics, mass media, neighbors) and including the macrosystem (e.g. attitudes and beliefs of the culture). Through my interactions with the teacher and student participants, I have impacted their learning environment through the reflections we engaged in. In fact, my presence alone impacted the study, as it was noted that the student participants completed the optional revision, some students revised their work multiple times to impress me. Therefore, it is important to note that when engaged in research, it is impossible for the researcher to reside outside of the participants ecological system as an outside observer.

**Contributing to the WCF canon with SCT**

The findings contribute to not only the evolving understanding of second language development, it also contributes to the WCF canon by answering Storch’s (2018) call for WCF research from a sociocultural theoretical perspective. In alignment with Larsen-Freeman (2016) shifting metaphors, research on WCF within L2 development using the SCT lens will provide a coherent understanding of how the SCT tenets of the ZPD and scaffolding to assess the nature and appropriateness of the feedback provided. This is captured in the WCF rendered and the level of explicitness as captured in table 4.4. This data helps to gauge where the learners are within their ZPD in the spectrum of what they can do with assistance and what they can do by themselves. The movement or changes to less explicit WCF represents the internalization process and the student’s progress towards self-regulatory practices.

Storch (2018) also called for a second area in building a SCT understanding of WCF. This area included an analysis of the tools and the consideration for learners responses to the tools used to provide WCF, including automated feedback. The
pandemic and remote learning made data collection on WCF prime with the use of new digital tools. Many of the tools discussed by the participants in the study were never utilized prior by them. In addition, these tools also provided automated feedback, which served as a second set of WCF to students as they wrote as described by Lissy and Babu. This provided the alternative to on-site practices that Nyima described where the teacher would walk to a student, monitor what they were writing, and correct as they wrote. Lastly, the digital tools led to innovation of practices that the teacher never engaged in before, the leaving the students’ written work untouched and the parsing out of the targeted sentences by using the copy and paste function. This practice also did not surface in the review of the literature.

**Future directions for WCF research from an ecological perspective**

This study provided K-12 cases studies of WCF for L2 writing development using a sociocultural lens from an ecological perspective with Newcomer ELLs, those with 3 years or less in the U.S. The study also focused on students with “Emerging” and “Transitioning” proficiencies in English, which reflects the lower to intermediate-ranges of the proficiency levels as depicted in figure 4.8. There is a need for more K-12 WCF case studies that utilized Sociocultural Theory and the ecological perspective involving additional ELL subgroups such as Developing ELLs, Long Term ELLs, SIFE and ELLs with learning disabilities that will provide insights to the nuances of the WCF rendered to these subgroups of ELLs as well as their differential responses to the WCF. Descriptions of each of these subgroups as identified by NYSED (2019e) are described in figure 4.9. ELL. This will provide a more detailed understanding of the individual and contextual factors that impact WCF. It will also reflect the diversity present within ELL populations
as clearly they are not a monolithic group as well as account for the affordances that are made for each subgroup.

In addition, the study focused on students with home languages of Malayalam and Mandingo. These reflect low incidence home languages, where translations of standardized examinations and instructional resources do not come readily available as compared to other home languages of ELLs including Spanish. Spanish is the home language of the majority of our English Language Learners in New York, in fact NYSED reported that the top spoke language was Spanish in 2017-2018 with 64.8% of the ELL population (NYSED, 2019a). More WCF cases studies with Spanish speaking ELLs should be completed to reflect this majority. Although I provided a presentation in English and Spanish to classrooms during the recruitment, and many expressed interests in participating, I did not receive many parent consent forms from Spanish speaking participants as families may have been wary about signing such forms or participating in such studies. In fact, I only received one from a Spanish-speaking family, and the student left the study midway. For future studies, it would be pertinent to also hold a presentation for the parents and families in order to build the relationship and trust to promote more participation from Spanish speaking ELLs and their families.

The data collected from this study will inform the potential next research project in comparing the level of explicitness within the WCF render to high school ELL students with higher proficiency of English. It would be interesting to note the differences in explicitness of the WCF compared to the data collected on the Newcomer ELLs with entering and emerging proficiency levels, particularly with the same ENL teacher or another ENL teacher to see if the intuition of teacher reflects the SCT tenets of
the ZPD shift from other-regulatory to self-regulatory practices. It will also inform the
frequency of how much and to what extent students of this proficiency level engage in
writing and revising using WCF. Even more exciting is the possibility of following the
student participants through their years in the high school, as they are 9th and 10th graders,
and as their proficiencies increase and experience gained in writing, does the WCF they
receive also shift based on the errors observed during this study?

Because the research on WCF within K-12 settings within the U.S. are very few
and far between, there is opportunities for more research within K-12 settings, be it for an
English as a New Language Setting, Bilingual Education setting, or World Language
contexts. This study focused within an ENL setting within 9th and 10th graders. There are
programs for ELLs also at the high school level in Bilingual education that would be
interesting to see how WCF is rendered when the home language is also utilized within
instruction. K-12 World Languages reflects another instructional context for second
language learning that can contribute to our understanding of WCF. Lastly, studies
within elementary and middle school ELL programs are uncharted territories as it relates
to L2 writing development and the WCF that is rendered.

Bronfenbrenner’s (1979, 1993) bioecological model served as both the paradigm
utilize to engage in this study, as well as part of the ecological perspective within
sociocultural theory in analyzing the students work. Within the study, the data and
analysis included multiple subsystems including the individual (e.g. sex, age,
background), microsystem (e.g. family and school), the mesosystem (e.g. the pandemic),
and the exosystem (e.g. politics); however, it only touched upon the attitudes and beliefs
from the macrosystem. Although teachers and students shared their beliefs regarding
correction, English learning, English language, and school, we did not dive deep to what informs these beliefs and perspectives besides from their own experiences. An opportunity to study the language ideologies on correction within and beyond the macrosystem will provide insights on the belief system from teacher, the culture of power that exists within correction, as well as what is considered requiring correction? The data suggests that little guidance from state education departments and teacher training is given to teachers in providing feedback, so what are the language ideologies that inform teachers’ intuition in providing correction? These are powerful and critical empirical questions in moving the field of feedback within L2 writing development forward.

**Reciprocity with participants in this study**

The immediate benefits that were observed for the participants themselves during the course of the study is that the teacher, Ms. Vails, as well as the student participants engaged in systematic reflection and metacognitive practices. Ms. Vails engaged in reflective pedagogy to better understand the feedback practices she engaged in, particularly she noted that the levels of explicitness in her WCF was something she never thought before (last interview). In addition, she engaged in self questioning of why she rendered particular WCF or addressed a particular grammatical error. She also thought of other ways she could have approach it, as well as reinforced her notions of why she did render a particular WCF. The retrospective verbal reports showed alignment to her beliefs and training on error correction to the actual WCF she rendered. The last interview provided the space for Ms. Vails to articulate her lessons learned and her next steps for the Spring semester as it relates to L2 writing development, namely the provision of class time for writing and revision tasks.
For Lissy, Babu and Nyima, the students engaged in metacognitive tasks to better understand their responses to the feedback they receive from their teachers. The students discussed what they found confusing, what was clear, and created recommendations for Ms. Vails to better inform their work in addressing their learning needs as it relates to WCF. For example, during the retrospective verbal report with Nyima, she did not notice that she missed some of the WCF and attributed it to her rushing. Babu recommended that Ms. Vails continues to highlight and using different color fonts in order to catch his attention as to what needs addressing, as well as not providing him the correct form all the time so that help him memorize the structure, reflecting indirect WCF.

**Praxis**

The implications from the results discussed above inform the direct applications that should be considered immediately in order to close the opportunities gaps afforded to our English Language Learners. This includes direct applications within K-12 school and classroom settings, school districts, teacher preparation programs, state education departments and community-based organizations. The case studies will be utilized to reference examples of the ELL Newcomers within our classrooms and the types of WCF they received and they interacted with during their revision, along with the notion of levels of explicitness and the movement along the ZPD through the shifting of WCF types as students need it.

**For Ms. Vails and her students**

Based on the data collected as well as within the review of the literature, WCF is time intensive, requiring teachers to dedicate much time and energy. In addition, teachers may be reluctant in provided WCF or multiple opportunities for WCF during the writing
process as teachers, including Ms. Vails, have indicated that students do not always look at it. Although the student participants in this study all completed the revision using Ms. Vails’, the data suggests that the students completed it in part to impress me. How do we cultivate this level of motivation when a researcher is not present? For Ms. Vails and her ENL classroom, she stated that she will shift her practice of providing class time for students to complete writing tasks and revision tasks to afford the opportunity for students to interact with the WCF provided. In fact, based on the findings of this study, my recommendation is for teachers in general, to provide the time and space during normal class time for students to engage in the writing process, including engagement with WCF. This way, students are provided with dedicated time to perceive and interact with the WCF. It will also provide opportunities for the students to ask clarifying questions to WCF they do not understand. Also, as students engage in the writing process, teachers should consider also providing feedback during class time while students write because it is time intensive.

It is also important to note how I, as the researcher, have impacted the participants in this study. Through the participation in this study, Ms. Vails also stated that she is now thinking about the different levels of explicit feedback that she is rendering to her students. During her retrospective verbal report, she indicated that “you really are making me think about this” and the data suggests that she has for the most part utilize her intuition and experience in providing WCF without thinking explicitly about the types of WCF and the level of explicitness it reflects. The student participants also shared suggestions during the interviews for Ms. Vails to consider when rendering WCF. These suggestions will be shared with the teacher to inform her practice. In fact, Brown (2020)
stated that whenever possible to involve students in the design of the WCF process. I would also encourage her to share her experiences and techniques with her ENL teacher colleagues, especially the practice of leaving the original writing untouched for comparison. The suggestions included from Babu stating to provide the form sometimes but not all the time so that he can rely on other tools in building autonomy while it helps him commit it to memory. Nyima asks if Ms. Vails can continue to provide her feedback by parsing out her sentences with WCF. Lissy suggests that the teacher continue to provide her with correction in general as it helps her learn.

Lastly, a recommendation I would make is for the teacher to not do this alone. It would be a wonderful opportunity for an ENL department to examine examples of student writing samples and calibrating together the feedback needed to continue L2 writing development with the use of WCF. This can be completed during a department meeting within the ENL department, and also across content within grade level faculty meetings when analyzing student work. The data suggests that ENL teachers provide WCF that are more explicit compare to content area teachers. Through collaborative meetings on ELL students written work, this presents opportunities for the content area teachers to understand the differential needs of English Language Learners in giving feedback to their writing that addresses morphosyntax with strategies from the ENL teachers.

*For adolescent classrooms with English Language Learners*

For middle school and high school classrooms, teachers would benefit from learning more about the different types of WCF that they may be already employing and learning about others, especially when rendering WCF digitally. For those who may be
experiencing the same reaction as Ms. Vails that the editing tools make the students writing appear to be bleeding through the screen that may demotivate ELLs, the WCF technique of parsing out sentences will be shared as an alternative. This information will be shared through the creation of a series professional development workshops to increase teacher capacity in rendering feedback to ELLs for L2 writing development. Guidance documents will also be created to provide an inventory of WCF types and their corresponding levels of explicitness when considering what to render based on the student’s proficiency level and background information on the targeted structure. More WCF data is required for the elementary schools in order to inform the creation of professional development workshops and materials.

**For school districts**

One major consideration for school districts is gauging the amount of writing and feedback that is rendered within classrooms. The implication from the study suggest that school districts should measure and determine what would be considered as sufficient given the needs of the students and class sizes. Once this is determined, policy and guidance should to be provided to schools on the expectation in engaging students with instruction regarding the writing process, to include WCF, especially for our English Language Learners as a way of building equity and access. It is important for ELLs not only to write about the content in passing high stakes examinations within the content areas, but also, be given opportunities to learn more about the structure of the English language utilized within the content areas. Specifically, the academic registers along with the morphosyntactic structures needed to write within the disciplines.
For institutions of higher learning

Teacher preparation programs, especially those that offer TESOL and Bilingual Education for grades 7-12, should ensure that course work related to English Language Learners provides training on scaffolding writing for students beyond the graphic organizer and inclusive of WCF. WCF, as described in this study, is a scaffold that can support not only morphosyntactic accuracy but also engage students in the writing process through revision. Ms. Vails and many teachers render WCF intuitively, based on their own experiences of receiving WCF and in their rendering with students.

WCF is not a perfect science and requires the consideration of the individual and contextual factors analyzed in this study. Teachers have to experiment with the WCF types and experiment with managing the interactions students have with it to see how students actually perceive and interact with it. Nevertheless, capacity building in becoming familiar with the different WCF types, focus, and level of explicitness will equip teacher with the tools they need to render WCF not just intuitively, but also, systematically with the end goal in mind of providing more implicit WCF. Teacher preparation courses should offer coursework in this if they are not doing so already. A direct application would be in the creation of a course syllabus with supporting research on how to integrated WCF within ELL language development methodology coursework.

For state education departments

State education department should also provide guidance and policy as it relates to language instruction in writing for Multilingual Learners. As New York State shifted into the Next Generation Learning Standards, a set of eight guidance briefing from Dr. Nonie Lesaux and Dr. Emily Phillips Galloway was released from the New York State Education Department.
Education Department that provided insights on how teachers can incorporate the rigor of the new standards through the practices of advanced literacies (NYSED, 2017). These advanced literacies for culturally and linguistically diverse students gave examples of the instructional literacy shifts within reading comprehension, engaging texts, talk and discussion to building academic languages, and writing to build language and knowledge. However, not once in any of the 8 briefing does it mention the provision of feedback to students, let alone WCF. Feedback in general and WCF in specific are ubiquitous instructional practices that has to be differentiated based on the individual students’ needs. School districts, schools and teachers require further guidance and development in building their feedback repertoire in meeting the needs of culturally and linguistically diverse classrooms, especially as it relates to English Language Learners.

Conclusion

This study has documented the importance of rendering WCF in building equity and access to English Language Learners in developing their morphosyntactic accuracy and self-editing skills within L2 writing development. Especially now more than ever when the opportunities gap has been exacerbated due to the coronavirus pandemic. WCF is a ubiquitous practice that the research has determined does positively impact L2 writing (Kang & Han, 2015); and is beneficial in the complex process of developing accuracy and self-editing skills for student writers (Brown, 2020). In order for it to be effective, it must consider the individual and contextual factors that shape the rendering of and responses to WCF (Bitchener and Storch, 2016; Han, 2019) and the level of explicitness of the WCF feedback should match what the student’s needs are while providing incremental shifts in reaching the goal (Brown, 2020). The goal being, that
students are able to self-regulate and engage in self-editing and correction with little to no prompting. This reflects more implicit practices.

The shifts of explicit WCF to implicit WCF reflect the internalization of the knowledge, as reflected in the regulatory scale in figure 2.2. With a Sociocultural Theory point of view, the change in the types of feedback provided (from explicit to implicit) are indicative of learning (Aljaafreh & Lantolf, 1994; van Lier, 2000; Gui, 2018). This provides a more holistic view of the second language learning process compared to cognitive theories of WCF, where the lens is fixated on the frequency of errors. This shift in theoretical stance also reflects a shift from deficient thinking, where the efficacy of the WCF is based on the presence or absence of errors. Instead, a SCT understanding looks to other indications of progress, such as the changes in the type of WCF rendered through time.

The ecological perspective enhances the SCT lens by also considering the contextual and individual factors within the social and cultural environments learners are situated in, as reflected in the Bioecological model in figure 1.3. By understanding the surrounding context that subsumes the learner, we can better analyze and adapt the affordances that are being rendered to the student, both physical and relational opportunities. Teachers are critical in the creation and managing of the learning spaces, be it on-site or via remote learning where students can interact meaningfully with the affordances provided to them, including WCF. Researcher also impact the ecological system through their presence as well as interactions with participants.

Through relationship building, teachers are informed of the students’ individual factors and preferences of WCF, involve students in the WCF design of the process, train
students to readily make sense of the feedback they receive, equipped students with enough knowledge to respond to the WCF, and challenged them with the appropriate amount of WCF supports (Brown, 2020). As embodied by Ms. Vails, teachers also influence the student perception of positive intent and encouragement behind the WCF rendered through relationship building. This makes all the difference in motivating students to engage in the L2 writing development. Lastly, as Ms. Vails concluded, teachers manage the time and incentive for students to meet the challenge of the writing process.

The case study captured in this investigation reflects the understanding that for L2 writing development, English Language Learners must be provided the affordance of feedback (specifically WCF) that is differentiated and frequent; however, time limitation and class sizes often impede the amount of extended written tasks and WCF provided to students, especially ELLs. Teachers must manage the relationship students have with the feedback in order for the feedback to be meaningful and have an effect on learning, this includes the provision of time and space for student to interact with the feedback. Because of how time intensive extended writing tasks can be, it was regulated to homework to be independently drafted and finish outside of the school day where students often rush and fail to fully comprehend the directions of the writing tasks and perceive the WCF that was provided. Teachers intuitively provide different forms of feedback with vary levels of explicitness on what they know about the student that mirrors the Zone of Proximal Development; however, they may do so without realizing the movement toward implicit practices is the goal. Lastly, students and teachers are able to quickly adapt within a crisis such as a pandemic using digital tools to engage in writing
and feedback in similar and innovative ways. The impact being that the teachers were able to provide feedback in a way they were not able to do so before, as Ms. Vails was able to completely leave the student writing untouched for comparison and honoring their work or students receiving digital feedback on their handwritten work. As we continue to move forward, the learnings from the extensive use of digital tools and experience with remotely learning can be pivoted in closing the opportunities gap for English Language Learners.
Appendix A: Teacher Recruitment Email Script

September 2020

Dear ENL Teachers,

Welcome back! I hope you had a restful and relaxing Summer break and are excited for the new school year. I am writing to solicit your help to engage in a study to learn more about effective ways to support our English Language Learners’ development in writing in English. I am conducting this study along with Dr. Brett Blake, professor and researcher from the School of Education at St. John’s University. This study will also serve as part of my doctoral dissertation.

If you would like to participate, the following are the study activities I will engage in with you:

1. Participate in 2 interviews concerning your perspective and beliefs on the feedback you provide to your students’ writing.
2. Participate in 1 reflective verbal report on your recent feedback on your students’ writing.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have your students’ writing samples collected and analyzed with your feedback.

In addition, your ELL students who want to participate and have parental consent will also engage in the following activities:

1. Participate in 2 interviews concerning their perspective and beliefs on the feedback you provide to their writing.
2. Participate in 1 reflective verbal report on their recent revision with the feedback you provided.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have their writing samples collected and analyzed with your feedback.

If you are interested in participating in this study, please email me at [jgonzalez2@yonkerspublicschools.org](mailto:jgonzalez2@yonkerspublicschools.org). I will send the “Teacher Consent Form” which contains additional details, information and participants rights.

Thank you for your time, consideration, and commitment to our Multilingual Learners. Have a great start to the academic year!

Sincerely,

Jordan González
Appendix B: Teacher Consent Form

September 2020

Dear Teacher,

You have been invited to take part in a research study to learn more about effective ways to support your students’ development in writing in English. This study will be conducted by Mr. Jordan González, Director of Language Acquisition, and Dr. Brett Blake, professor and researcher from the School of Education, St. John’s University. This study will also serve as part of Mr. González’s doctoral dissertation.

If you give consent to participate in this study, you will be asked to do the following:

1. Participate in 2 interviews concerning your perspective and beliefs on the feedback you provide to your students’ writing.
2. Participate in 1 reflective verbal report on your recent feedback on your students’ writing.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have your students’ writing samples collected and analyzed with your feedback.

Your interviews will be audio or video taped. You may review these tapes and request that all or any portion of the tapes be destroyed. Participation in this study will involve approximately four hours of time: 1 hour for each of the two interviews, and one hour for each of the reflective verbal reports. The interviews will occur at the beginning and the end of the Fall 2020 semester. The reflective verbal reports will occur after approximately 30 days after the start of the semester for the first one, and the second will occur after another 30 days.

There are no known risks associated with your participation in this research beyond those of everyday life. All interviews and reflective verbal reports will be held using computer video conferencing programs to ensure your safety and wellness during the COVID19 pandemic. Physical classroom observations (if any) will maintain the Center for Disease Control and Prevention (CDC) guidelines of social distancing and hygienic practices.

Although you will receive no direct benefits, this research may help us understand the individual learner and contextual factors that shape English Language Learners writing development better. Confidentiality of your research records will be strictly maintained by using codes and aliases to refer to participants, as well as keeping consent forms separate from data to make sure that the subject’s name and identity will not become known or linked with any information they have provided. Your responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities, suspicion of harm to yourself, to children, or to others.
Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. You also have the right to skip or not answer any questions you prefer not to answer. Nonparticipation or withdrawal will not affect your professional evaluations or standing.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Mr. Jordan González at (646) 707-1490 or email at jgonzalez2@yonkerspublicschools.org. You can also contact the faculty sponsor, Dr. Brett Blake, at (516) 695-7407 or email at blakeb@stjohns.edu.

For questions about your rights as a research participant, you may contact the Institutional Review Board, St. John’s University, Dr. Raymond DiGiuseppe, Chairperson, digiuser@stjohns.edu, 718-990-1955 or 718-990-1440. You will be given a copy of this student consent form to keep.

Permission to Participate

I have read and understood the information describe above and give consent to participate in this study.

__________________________________________________________________________
Name of Teacher

_____________________________________________________________________
Teacher’s Signature Date

_____________________________________________________________________

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Appendix C: Student Oral Recruitment Script

Hello students and welcome back! I hope you had a restful and relaxing Summer break and are excited for the new school year. My name is Jordan González and serve as the Director of Language Acquisition for Yonkers Public Schools. My role is to ensure we provide quality programs and services to assist you in your academic development. I am here today because your teacher has agreed to participate in a study that I am conducting as part of my doctoral dissertation, I hope to become Dr. González and become an expert in the field of Education. The focus of my study is explore and build a better understanding on how we as educators can support in your writing development in English. Specifically, I am interest in the types of feedback your teacher provides to you in your writing, and how you respond to that feedback. If you are interested in participating in this study with your teacher and I, you will engage in the following activities.

1. Participate in 2 interviews concerning your perspective and beliefs on the feedback you receive on your writing.
2. Participate in 1 reflective verbal report on your recent revision with the feedback you were provided.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have your writing samples collected and analyzed with your teacher’s feedback.

As you can see, my study is very interested in gaining your perspectives and insights as your voice is vital in developing our collective understanding. If you are interested, I will ask your teacher to share two forms with you. These forms are consent forms for your parents or guardians. These forms have additional information such as contact information and your rights as a participant. If you and your parents agree to consent to participate in this study, I will need for you to sign the Student consent form, and your parents or guardians to sign the Parent Consent Form.

If you have any additional questions, please email me at jgonzalez2@yonkerspublicschools.org. Thank you for your time and consideration.

Have a great start to the academic year!
Appendix D: Parental Consent Forms

September 2020

Dear Parent or Guardian,

Your child has been invited to take part in a research study to learn more about effective ways to support your child’s development of his/her writing in English. This study will be conducted by Mr. Jordan González, Yonkers Public Schools Director of Language Acquisition, and Dr. Brett Blake, professor and researcher from the School of Education, St. John’s University. This study will also serve as part of Mr. González’s doctoral dissertation.

1. Participate in 2 interviews concerning their perspective on the feedback he/she receives on their writing.
2. Participate in 1 reflective verbal reports on his/her writing revisions.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have their writing samples collected and analyzed.

Your child’s interviews will be audio or video taped. You as the parent may review these tapes and request that all or any portion of the tapes be destroyed. Participation in this study will involve approximately four hours of time: 1 hour for each of the two interview, and one hour for each of the reflective verbal reports. The interviews will occur at the beginning and the end of the Fall 2020 semester. The reflective verbal reports will occur after approximately 30 days after the start of the semester for the first one, and the second will occur after another 30 days.

There are no known risks associated with your child’s participation in this research beyond those of everyday life. All interviews and reflective verbal reports will be held using computer video conferencing programs to ensure the safety and wellness of your child during the COVID19 pandemic. Physical classroom observations (if any) will maintain the Center for Disease Control and Prevention (CDC) guidelines of social distancing and hygienic practices.

Although your child will receive no direct benefits, this research may help us understand the individual learner and contextual factors that shape English Language Learners writing development better. Confidentiality of your child’s research records will be strictly maintained by using codes and aliases to refer to student participants, as well as keeping consent forms separate from data to make sure that the subject’s name and identity will not become known or linked with any information they have provided. Your child’s responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities, suspicion of harm to yourself, to children, or to others.
Participation in this study is voluntary. Your child may refuse to participate or withdraw at any time without penalty. Your child also has the right to skip or not answer any questions he/she prefers not to answer. Nonparticipation or withdrawal will not affect your child's grades or academic standing, nor would it affect the services your child receives at school.

If there is anything about the study or your child’s participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Mr. Jordan González at (646) 707-1490 or email at jgonzalez2@yonkerspublicschools.org. You can also contact the faculty sponsor, Dr. Brett Blake, at (516) 695-7407 or email at blakeb@stjohns.edu.

For questions about your child’s rights as a research participant, you may contact the Institutional Review Board, St. John’s University, Dr. Raymond DiGiuseppe, Chairperson, digiuser@stjohns.edu, 718-990-1955 or 718-990-1440. You will be given a copy of this parental permission form to keep.

Permission to Participate

I have read and understood the information describe above and give consent to my child to participate in this study.

__________________________________________
Name of Child

__________________________________________
Parent’s Signature                     Date
Formulario de Permiso Parental

Septiembre del 2020

Estimado Padres o Guardianes,

Se ha invitado a su hijo a participar en un estudio de investigación para aprender más sobre las formas efectivas de apoyar el desarrollo de la escritura en inglés. Este estudio será realizado por el Sr. Jordan González, Director de Adquisición de Idiomas de las Escuelas Públicas de Yonkers, y la Dra. Brett Blake, profesora e investigadora de la Escuela de Educación de la Universidad de St. Johns. Este estudio también servirá como parte de la tesis doctoral del Sr. González.

Si autoriza la participación de su hijo/a en este estudio, se le pedirá que haga lo siguiente:

1. Participe en 2 entrevistas sobre su perspectiva sobre los comentarios que recibe sobre su escritura.
2. Participe en 1 informe verbale reflexivo sobre sus revisiones de escritura.
3. Ser observado durante la instrucción en el aula en la escuela o en línea atraves del internet durante el aprendizaje a distancia.
4. Haga que sus muestras de escritura sean recolectadas y analizadas.

Las entrevistas de su hijo serán grabadas en audio o video. Usted, como padre, puede revisar estas grabaciones y solicitar que se destruyan todas o algunas secciones de las grabaciones. La participación en este estudio implicará aproximadamente cuatro horas de tiempo: 1 hora para cada una de las dos entrevistas y una hora para cada uno de los informes verbales reflexivos. Las entrevistas se realizarán al comienzo y al final del semestre de otoño del 2020. Los informes verbales reflexivos ocurrirán después de aproximadamente 30 días después del inicio del semestre para el primero, y el segundo ocurrirá después de otros 30 días.

No se conocen riesgos asociados con la participación de su hijo/a en esta investigación más allá de los de la vida cotidiana. Todas las entrevistas y los informes verbales reflexivos se realizarán mediante programas de videoconferencia por computadora para garantizar la seguridad y el bienestar de su hijo/a durante la pandemia de COVID19. Las observaciones físicas en el aula (si las hubiera) mantendrán las reglas del Centro para el Control y la Prevención de Enfermedades (CDC) de distanciamiento social y prácticas de higiene.

Aunque su hijo no recibirá beneficios directos, esta investigación puede ayudarnos a comprender al alumno individual y los factores contextuales que afectan el desarrollo de la escritura de los estudiantes que están aprendiendo inglés como nuevo Idioma. La confidencialidad de los registros de investigación de su hijo/a se mantendrá estrictamente mediante el uso de códigos y alias para referirse a los estudiantes participantes, así como manteniendo los formularios de consentimiento separados de los datos para asegurarse de que el nombre y la identificación del sujeto no se conozcan ni se vinculen con la...
información que tengan. Las respuestas de su hijo se mantendrán confidenciales con la siguiente excepción: el investigador está obligado por ley a informar a las autoridades correspondientes, sospecha de daño a usted mismo, a los niños u otros.

La participación en este estudio es voluntario. Su hijo puede negarse a participar o retirarse en cualquier momento sin penalización. Su hijo también tiene derecho a omitir o no contestar cualquier pregunta que prefiera no responder. La falta de participación o retiro no afectará las calificaciones, ni la posición académica de su hijo/a, ni afectará los servicios que recibe su hijo/a en la escuela.

Si hay algo sobre el estudio o la participación de su hijo que no está claro o que no comprende, si tiene preguntas o desea informar un problema relacionado con la investigación, puede comunicarse con el Sr. Jordan González al (646) 707-1490 o correo electrónico a jgonzalez2@yonkerspublicschools.org. También puede contactar al patrocinadora de la facultad, Dr. Brett Blake, al (516) 695-7407 o enviar un correo electrónico ablakeb@stjohns.edu.

Si tiene preguntas sobre los derechos de su hijo/a como participante de la investigación, puede comunicarse con la Junta de Revisión Institucional, la Universidad de St. John, el Dr. Raymond DiGiuseppe, Presidente, digiuser@stjohns.edu, 718-990-1955 o 718-990-1440. Se le entregará una copia de este formulario de permiso parental para conservar.

Permiso para participar

He leído y comprendido la información descrita anteriormente y doy mi consentimiento para que mi hijo/a participe en este estudio.

________________________________________________________________________

Nombre del niño/a

________________________________________________________________________

Firma de los padres

Fecha
Appendix E: High School Student Assent Forms (Ages 14-17)

September 2020

Dear Student,

You have been invited to take part in a research study to learn more about effective ways to support your development in writing in English. This study will be conducted by Mr. Jordan González, Director of Language Acquisition, and Dr. Brett Blake, professor and researcher from the School of Education, St. John’s University. This study will also serve as part of Mr. González’s doctoral dissertation.

If you give consent to participate in this study, you will be asked to do the following:
1. Participate in 2 interviews concerning your perspective on the feedback you receive on your writing.
2. Participate in 1 reflective verbal report on your writing revisions.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have your writing samples collected and analyzed.

Your interviews will be audio or video taped. You may review these tapes and request that all or any portion of the tapes be destroyed. Participation in this study will involve approximately four hours of time: 1 hour for each of the two interviews, and one hour for each of the reflective verbal reports. The interviews will occur at the beginning and the end of the Fall 2020 semester. The reflective verbal reports will occur after approximately 30 days after the start of the semester for the first one, and the second will occur after another 30 days.

There are no known risks associated with your participation in this research beyond those of everyday life. All interviews and reflective verbal reports will be held using computer video conferencing programs to ensure your safety and wellness during the COVID19 pandemic. Physical classroom observations (if any) will maintain the Center for Disease Control and Prevention (CDC) guidelines of social distancing and hygienic practices.

Although you will receive no direct benefits, this research may help us understand the individual learner and contextual factors that shape English Language Learners writing development better. Confidentiality of your research records will be strictly maintained by using codes and aliases to refer to student participants, as well as keeping consent forms separate from data to make sure that the subject’s name and identity will not become known or linked with any information they have provided. Your responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities, suspicion of harm to yourself, to children, or to others.
Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. You also have the right to skip or not answer any questions you prefer not to answer. Nonparticipation or withdrawal will not affect your grades or academic standing, nor would it affect the services you receive at school.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Mr. Jordan González at (646) 707-1490 or email at jgonzalez2@yonkerspublicschools.org. You can also contact the faculty sponsor, Dr. Brett Blake, at (516) 695-7407 or email at blakeb@stjohns.edu.

For questions about your rights as a research participant, you may contact the Institutional Review Board, St. John’s University, Dr. Raymond DiGiuseppe, Chairperson, digiuser@stjohns.edu, 718-990-1955 or 718-990-1440. You will be given a copy of this student consent form to keep.

Permission to Participate

I have read and understood the information describe above and give consent to participate in this study.

__________________________________________
Name of Student

__________________________________________    _____________
Student’s Signature                                Date
Formulario de consentimiento de estudiantes de secundaria (edades 14-17)

Septiembre 2020

Querido estudiante,

Usted ha sido invitado a participar en un estudio de investigación para aprender más sobre las formas efectivas de apoyar su desarrollo en la escritura en inglés. Este estudio será realizado por el Sr. Jordan González, Director de Adquisición de Idiomas de las Escuelas Públicas de Yonkers, y la Dra. Brett Blake, profesora e investigadora de la Escuela de Educación de la Universidad de St. John’s. Este estudio también servirá como parte de la tesis doctoral del Sr. González.

Si da su consentimiento para participar en este estudio, se le pedirá que haga lo siguiente:

1. Participe en 2 entrevistas sobre su perspectiva sobre los comentarios que recibe sobre su escritura.
2. Participe en 1 informe verbal reflexivo sobre sus revisiones escritas.
3. Ser observado durante la instrucción en el aula en la escuela o en línea durante el aprendizaje a distancia.
4. Haga que sus muestras de escritura sean recolectadas y analizadas.

Sus entrevistas serán grabadas en audio o video. Puede revisar estas cintas y solicitar que se destruyan todas o una parte de las cintas. La participación en este estudio implicará aproximadamente cuatro horas de tiempo: 1 hora para cada una de las dos entrevistas y una hora para cada uno de los informes verbales reflexivos. Las entrevistas se realizarán al comienzo y al final del semestre de otoño de 2020. Los informes verbales reflexivos ocurrirán después de aproximadamente 30 días después del inicio del semestre para el primero, y el segundo ocurrirá después de otros 30 días.

No hay riesgos conocidos asociados con su participación en esta investigación más allá de los de la vida cotidiana. Todas las entrevistas y los informes verbales reflexivos se realizarán mediante programas de videoconferencia por computadora para garantizar su seguridad y bienestar durante la pandemia de COVID19. Las observaciones físicas en el aula (si las hubiera) mantendrán las reglas del Centro para el Control y la Prevención de Enfermedades (CDC) de distanciamiento social y prácticas de higiene.

Aunque no recibirá beneficios directos, esta investigación puede ayudarnos a comprender al alumno individual y los factores contextuales que dan forma al desarrollo de la escritura de los Estudiantes que están aprendiendo inglés como nuevo idioma. La confidencialidad de sus registros de investigación se mantendrá estrictamente mediante el uso de códigos y alias para referirse a los estudiantes participantes, así como manteniendo los formularios de consentimiento separados de los datos para asegurarse de que el nombre y la identidad del sujeto no se conozcan ni se vinculen con la información que hayan proporcionado. Sus respuestas se mantendrán confidenciales con la siguiente...
excepción: la ley requiere que el investigador informe a las autoridades correspondientes, sospecha de daño a usted mismo, a los niños u otros.

La participación en este estudio es voluntario. Puede negarse a participar o retirarse en cualquier momento sin penalización. También tiene derecho a omitir o no responder cualquier pregunta que prefiera no responder. La no participación o retiro no afectará sus calificaciones o su posición académica, ni afectará los servicios que recibe en la escuela.

Si hay algo sobre el estudio o su participación que no está claro o que no comprende, si tiene preguntas o desea informar un problema relacionado con la investigación, puede comunicarse con el Sr. Jordan González al (646) 707-1490 o enviar un correo electrónico a jgonzalez2@yonkerspublicschools.org. También puede contactar al patrocinadora de la facultad, Dr. Brett Blake, al (516) 695-7407 o enviar un correo electrónico a blakeb@stjohns.edu.

Para preguntas sobre sus derechos como participante de investigación, puede comunicarse con la Junta de Revisión Institucional, Universidad de St. Johns, Dr. Raymond DiGiuseppe, Presidente, digiuser@stjohns.edu, 718-990-1955 o 718-990-1440. Se le entregará una copia de este formulario de consentimiento del estudiante para conservar.

Consentimiento para participar

He leído y entiendo la información descrita anteriormente y doy mi consentimiento para participar en este estudio.

________________________________________________________________________
Nombre del estudiante

________________________________________________________________________
Firma del estudiante Fecha
Dear Student,

You have been invited to take part in a research study to learn more about effective ways to support your development in writing in English. This study will be conducted by Mr. Jordan González, Director of Language Acquisition, and Dr. Brett Blake, professor and researcher from the School of Education, St. John’s University. This study will also serve as part of Mr. González’s doctoral dissertation.

If you give consent to participate in this study, you will be asked to do the following:

1. Participate in 2 interviews concerning your perspective on the feedback you receive on your writing.
2. Participate in 1 reflective verbal report on your writing revisions.
3. Be observed during classroom instruction at school or online during distance learning.
4. Have your writing samples collected and analyzed.

Your interviews will be audio or video taped. You may review these tapes and request that all or any portion of the tapes be destroyed. Participation in this study will involve approximately four hours of time: 1 hour for each of the two interviews, and one hour for each of the reflective verbal reports. The interviews will occur at the beginning and the end of the Fall 2020 semester. The reflective verbal reports will occur after approximately 30 days after the start of the semester for the first one, and the second will occur after another 30 days.

There are no known risks associated with your participation in this research beyond those of everyday life. All interviews and reflective verbal reports will be held using computer video conferencing programs to ensure your safety and wellness during the COVID19 pandemic. Physical classroom observations (if any) will maintain the Center for Disease Control and Prevention (CDC) guidelines of social distancing and hygienic practices.

Although you will receive no direct benefits, this research may help us understand the individual learner and contextual factors that shape English Language Learners writing development better. Confidentiality of your research records will be strictly maintained by using codes and aliases to refer to student participants, as well as keeping consent forms separate from data to make sure that the subject’s name and identity will not become known or linked with any information they have provided. Your responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities, suspicion of harm to yourself, to children, or to others.
Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. You also have the right to skip or not answer any questions you prefer not to answer. Nonparticipation or withdrawal will not affect your grades or academic standing, nor would it affect the services you receive at school.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Mr. Jordan González or email at [email protected]. You can also contact the faculty sponsor, Dr. Brett Blake, at [email protected] or email at blakeb@stjohns.edu.

For questions about your rights as a research participant, you may contact the Institutional Review Board, St. John’s University, Dr. Raymond DiGiuseppe, Chairperson, digiuser@stjohns.edu, 718-990-1955 or 718-990-1440. You will be given a copy of this student consent form to keep.

Permission to Participate

I have read and understood the information described above and give consent to participate in this study.

____________________________________________
Name of Student

____________________________________________
Student’s Signature

Date

____________________________________________
Querido estudiante,

Usted ha sido invitado a participar en un estudio de investigación para aprender más sobre las formas efectivas de apoyar su desarrollo en la escritura en inglés. Este estudio será realizado por el Sr. Jordan González, Director de Adquisición de Idiomas de las Escuelas Públicas de Yonkers, y la Dra. Brett Blake, profesora e investigadora de la Escuela de Educación de la Universidad de St. John’s. Este estudio también servirá como parte de la tesis doctoral del Sr. González.

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1. Participe en 2 entrevistas sobre su perspectiva sobre los comentarios que recibe sobre su escritura.
2. Participe en 1 informe verbal reflexivo sobre sus revisiones escritas.
3. Ser observado durante la instrucción en el aula en la escuela o en línea durante el aprendizaje a distancia.
4. Haga que sus muestras de escritura sean recolectadas y analizadas.

Sus entrevistas serán grabadas en audio o video. Puede revisar estas cintas y solicitar que se destruyan todas o una parte de las cintas. La participación en este estudio implicará aproximadamente cuatro horas de tiempo: 1 hora para cada una de las dos entrevistas y una hora para cada uno de los informes verbales reflexivos. Las entrevistas se realizarán al comienzo y al final del semestre de otoño de 2020. Los informes verbales reflexivos ocurrirán después de aproximadamente 30 días después del inicio del semestre para el primero, y el segundo ocurrirá después de otros 30 días.

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Aunque no recibirá beneficios directos, esta investigación puede ayudarnos a comprender al alumno individual y los factores contextuales que dan forma al desarrollo de la escritura de los Estudiantes que están aprendiendo inglés como nuevo idioma. La confidencialidad de sus registros de investigación se mantendrá estrictamente mediante el uso de códigos y alias para referirse a los estudiantes participantes, así como manteniendo los formularios de consentimiento separados de los datos para asegurarse de que el nombre y la identidad del sujeto no se conozcan ni se vinculen con la información que
hayan proporcionado. Sus respuestas se mantendrán confidenciales con la siguiente excepción: la ley requiere

que el investigador informe a las autoridades correspondientes, sospecha de daño a usted mismo, a los niños u otros.

La participación en este estudio es voluntario. Puede negarse a participar o retirarse en cualquier momento sin penalización. También tiene derecho a omitir o no responder cualquier pregunta que prefiera no responder. La no participación o retiro no afectará sus calificaciones o su posición académica, ni afectará los servicios que recibe en la escuela.

Si hay algo sobre el estudio o su participación que no está claro o que no comprende, si tiene preguntas o desea informar un problema relacionado con la investigación, puede comunicarse con el Sr. Jordan González al [número de teléfono] o enviar un correo electrónico a [dirección de correo electrónico]. También puede contactar al patrocinadora de la facultad, Dr. Brett Blake, al [número de teléfono] o enviar un correo electrónico a [dirección de correo electrónico].

Para preguntas sobre sus derechos como participante de investigación, puede comunicarse con la Junta de Revisión Institucional, Universidad de St. Johns, Dr. Raymond DiGiuseppe, Presidente, digiuser@stjohns.edu, 718-990-1955 o 718-990-1440. Se le entregará una copia de este formulario de consentimiento del estudiante para conservar.

Consentimiento para participar

He leído y entiendo la información descrita anteriormente y doy mi consentimiento para participar en este estudio.

_________________________________________________________________________

Nombre del estudiante

_________________________________________________________________________

Firma del estudiante Fecha
Appendix F: Writing Task (WT)

Unit: Pandemics across time and space
Lesson 1: Black Death: How the Bubonic Plague Impacted Medieval Europe

SESSION 4

Symptoms of Black Death

About this session: Now you know how the disease spread across Europe. In this session, you will learn about the symptoms of the Black Death by examining paintings and drawings depicting the plague, and reading first-person accounts of people who experienced or witnessed the disease.

Activity: Using Visual Texts and Primary Source Documents to Construct Understanding

Look at the pictures and texts below. Pay close attention to the symptoms and the timeline of the disease once people became sick.

Source 1
Date: 1673
Title: St. Marcarius of Ghent Giving Aid to the Plague Victims
Artist: Jacob van Oost the Younger
| Source 2          | Date: 15th Century  
| Title: Peste nera (Black Plague)  
| Artist: Unknown |
| Source 3         | Date: 14th Century  
| Title: Peste bubonique  
| Artist: unknown |
| Source 4         | Text: The Decameron  
| Author: Giovanni Boccaccio  
| Date: 1353 |
| Source 5         | Text: A letter  
| Author: unknown |

"[People had] swellings in the groin or under the armpit. [The swellings] grew to the size of a small apple or an egg...in a short space of time, they spread all over the body. Soon after this, the symptoms changed and black or purple spots appeared on the arms or thighs or any other part of the body, sometimes a few large ones, sometimes many little ones. These spots were a certain sign of death."

"[When people got sick with the plague, they had sores] all over the body and felt a terrible lassitude"
Author: Michele di Piazze
Date: 1347

[fatigue]. There then appeared, on a thigh or an arm,
a pustule like a lentil. From this the infection
penetrated the body and violent bloody vomiting
began. It lasted for a period of three days and there
was no way of preventing its ending in death.”

Pretend you are living in a city or town in Europe during the Black Death. Using at least
two of the primary source documents above, write a letter to a friend or family member,
telling them what you are seeing and warning them about this new disease. Your letter
should include:
● at least two symptoms of the disease
● how long people can live once they become sick
● a description of what happens to people who have the disease

My Letter:
Dear _______________,

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Looking Ahead: You have learned about the way the bubonic plague ravaged people’s bodies, and how the illness progressed and killed people in just a few days. Next you will be learning about the various ways that people tried to treat or cure people of the disease.

Appendix G: Instructions for Retrospective Verbal Report of Learner Participants

Adapted from Han (2019)

I am studying how students respond to teacher's feedback on grammar errors in writing. You are going to see the teacher's feedback on grammar errors in your previous draft, and your
revisions made in the final draft.

I am interested in what you were thinking at the time you were reading teacher feedback on these grammatical errors and using the feedback to revise the draft. I would like to ask you to tell me what you were thinking when you received teacher feedback on grammar errors and when you revised the draft.

I will indicate on the screen the feedback that you received on grammatical errors in the first draft, and the revisions you made in the second draft. Please talk about what was on your mind when you were responding to the feedback and revising your draft. Please tell me what you were thinking THEN, rather than what you are thinking NOW. You may choose to recall in Spanish, English, or a mixture of both. During your recall, I will minimize my response to the content of your talk. Do you have any questions so far? If not, let's start now.
Appendix H: Instructions for Retrospective Verbal Report of Teacher Participants

I am studying how teachers’ decide on which student grammatical errors to address, when feedback should be provided, where should the feedback exist within the student’s written work, and what type of feedback should be provided. You are going to see the feedback you provided on your students’ written work.

I am interested in what you were thinking at the time you were rendering your feedback on these grammatical errors. I would like to ask you to tell me what you were thinking when you came across particular grammatical errors on your student’s writing, why that particular error, and the type of feedback your provided. Also I will ask you for your intended goal for the feedback for the subsequent student revision.

I will indicate on the screen the feedback that you provided on grammatical errors in the student’s draft. Please talk about what was on your mind when you were rendering the feedback. Please tell me what you were thinking THEN, rather than what you are thinking NOW. During your recall, I will minimize my response to the content of your talk. Do you have any questions so far? If not, let's start now.
Appendix I: Interview Guides for Students and Teacher
Adapted from Han (2019)

The first student interview
Personal experience and goals of English learning and English writing.

1. What is your goal of English learning in high school?
2. Tell me about your experiences during the COVID19 pandemic?
3. How has COVID19 and the School closures impacted your learning?
4. Do you have access to technology and/or WIFI to engage in distance learning?
5. What are some of the new digital tools you are using with your teachers? Do you like these tools?
6. Do you prefer learning by coming to school or engage in distance learning using the digital tools you identified?
7. Tell me about your learning experiences of English writing in high school thus far.
8. How did your high school English teachers help with the grammatical problems in your writing? Was it different during distance learning?
9. How do English teachers in the school help with the grammatical problems in your writing?
10. Share with me about your experiences of English as a New Language courses so far.
11. What role do you think English plays in your future life and career after graduation?

Learner beliefs about and attitudes toward English writing and teacher feedback.

8. In your opinion, how important are writing skills as a part of English learning?
9. In your opinion, what qualities should a good English essay have?
10. What are strengths and weaknesses of your own English writing?
11. How important do you think grammar is in English writing?
12. Teachers may give feedback on grammar errors in student writing. Sometimes they may correct errors for you, underline errors, give comments, or offer some clues. In general, what do you think of teacher feedback on grammar errors?
13. In your opinion, what the “ideal” teacher feedback on grammar errors look like? Would it be better to receive handwritten teacher feedback or digital teacher feedback?
14. What do you think is the main reason why your teacher gives feedback on grammar errors to you?
15. To what extent do you usually understand teacher feedback on grammar errors?
16. Have you ever found teacher feedback on grammar errors confusing or unclear to you? Can you give me an example?
17. What are the reasons why teacher feedback on grammar errors was sometimes difficult to understand?
18. Which feedback is easier to understand, handwritten or digital feedback? Why?
19. What do you do with the teacher feedback on grammar errors that you did not understand?
20. What resources and strategies do you usually use to revise your draft?
21. How do you feel when you receive feedback from your teacher on grammar errors in your writing?
22. Do you think teacher feedback on grammar errors is helpful for you? Why or why not? Can you give me an example of useful feedback?
23. Your teacher wants to improve the way he/she gives feedback to you. What advice or suggestions would you give him/her? What suggestions would you provide when feedback is given via distance learning?
24. Do you have further comments or reflections on English learning and English writing?

Final student interview
1. Tell me about your experiences of learning English over the semester.
2. Tell me about your experience of learning English writing over the semester.
3. How has social distancing, hybrid learning or distance learning impacted your learning experiences?
4. Have you had access to technology and WIFI throughout the semester?
5. How do you like your English teacher? What do you think about him/her?
6. Tell me about your experiences of using teacher feedback on grammar errors over the semester, both handwritten and digital feedback.
7. In general, how much did you understand your teacher's feedback on grammar errors? Was there a difference in understanding handwritten and digital feedback?
8. What kinds of teacher feedback on grammar do you think were easy to understand?
9. What did you usually do if teacher feedback on grammar is confusing to you?
10. How did you use teacher feedback on grammar to revise your drafts?
11. What did you do if you disagree with your teacher's feedback on grammar error?
12. What did you do if you cannot find a solution to a grammar problem when revising your draft?
13. What resources did you usually use to revise your draft?
14. Would you review and correct the part of your text that your teacher did not give any feedback? Why?
15. What did you feel about teacher feedback on grammar in general?
16. How did you feel about the digital tools utilized when receiving feedback and revising your written work?
17. In what aspect do you think teacher feedback on grammar has been the most helpful?
18. In what aspect do you think teacher feedback on grammar has been the least helpful?
19. What modality of feedback was the most helpful, written or digital? Why?
20. What do you think your teacher should have done differently when she or he provided feedback on your grammar errors over the semester?
21. Do you have further reflections and comments on teacher feedback on grammar errors, revisions, or English writing in general?
Personal experiences of English writing and English teaching.
1. Tell me about your English teaching experience.
2. What do you remember about how you were taught English writing?
3. Tell me about your experiences of teaching English writing to high school ELLs?
4. Tell me about your experience during the COVID19 pandemic?
5. How was your experience engaging in distance learning during school closures?
6. What you think were some of the successes of distance learning? What were some of the challenges of distance learning?
7. Tell me about your experiences in using Learning Management Systems (LMS) or digital learning platforms to teach your students?

Teacher beliefs about English learning, English writing, and teaching of English writing.
8. In your opinion, how important are writing skills as a part of English learning?
9. What qualities do you look for when you mark students' essays?
10. What do you believe are the strengths and weaknesses of your students' writing?
11. In your opinion, to what percentage of time should be allocated to English writing in class?
12. What approach do you use when you teach English writing to your students?
13. In your opinion, is the teaching and learning of English writing easily facilitated via handwritten activities or by using digital tools? Why?

Teacher beliefs about written corrective feedback (WCF) and WCF practices.
14. How do you usually address students' grammatical errors in writing? How different does this look like using digital tools?
15. When a teacher gives feedback on grammatical errors in student writing, this feedback is called written corrective feedback. There are many types of written corrective feedback, like underlining errors, giving clues, correcting errors, giving comments, etc. Have you given any written corrective feedback to your students?
16. To what extent does your written corrective feedback differ using digital tools?
17. Do you have a preferred type of written corrective feedback? Why do you prefer this type of written corrective feedback?
18. What other types of written corrective feedback do you use?
19. Do you prefer to provide handwritten or digital feedback? Why?
20. Do you tailor your feedback to different learners? Why so or why not?
21. If you tailor your feedback to different learners, in what ways do you do that?
22. When providing written corrective feedback, what factors do you consider?
23. Do you consider students’ proficiency level when providing different types written corrective feedback? Why?
24. What are some major constraints that you face when giving written corrective feedback?
25. What do you expect students to do with your written corrective feedback?
26. If students do not use your feedback in the way that you expected, what do you do?
27. Do student respond to your feedback differently when it is provided handwritten versus when it is provided digitally? How so? Why?
28. A new teacher seeks your advice about improving the way he/she gives feedback to his/her students. What advice or suggestions would you give him/her?
29. Do you have any further comments or reflections on English writing or written corrective feedback?

Final teacher interview
1. Tell me about your experience of providing written corrective feedback over the semester.
2. How has social distancing, hybrid instruction or distant learning impacted the instruction you provided to your students?
3. What factors have influenced your provision of written corrective feedback?
4. Can you think of any situations where you found difficult to provide written corrective feedback? Can you give me some examples?
5. To what extent do you think students have understood your written corrective feedback?
6. To what extent do you think students have addressed linguistic errors with the help of written corrective feedback?
7. To what extent do you think your written corrective feedback has improved students' knowledge of grammar and vocabulary?
8. Did you notice if any feedback was ignored by the students when they revise the draft? (Show examples) What might be the reason why students ignored it?
9. Did students respond differently between handwritten or digital feedback? Why?
10. What help or instruction do you think can better help students to use your written corrective feedback?
11. How do you think students would feel about your written corrective feedback? Why?
12. Looking back at your experience of providing written corrective feedback over the semester, what would you have done differently?
13. Do you have any suggestions and comments to share with your colleagues regarding written corrective feedback?
14. Do you have any further comments or reflections on addressing learners' written grammatical errors?
REFERENCES


Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and


security-issue-2020-7?utm_source=copy-link&utm_medium=referral&utm_content=topbar


Retrieved August 2, 2020, from
https://www.canr.msu.edu/news/how_trauma_can_affect_nutrition

Language Teaching 39, 83–101


NYSED (2019). Working with Multilingual Leaners (MLLs)/ English Language


NYSED (2021). State Education Department Releases 2016 Cohort High School


Sachs, R., & Polio, C., (2007). Learners’ use of two types of written feedback on an L2


Truscott, J. (1999). The case for "the case for grammar correction in L2 writing classes."


*Journal of Child Psychology and Psychiatry, 17*, 89-100.


Retrieved from: [https://doi.org/10.1016/S2468-2667(20)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0)

Vita

Name

Jordan González

Baccalaureate Degree

Bachelor of Arts, Cornell University, Ithaca, Major: Spanish Literature, Latin American Studies & U.S. Latino Studies

Date Graduated

May, 2008

Other Degrees and Certificates

Master of Arts, New York University, Major: Spanish and Latin American Literatures and Cultures (2009)

Master of Arts, The New School University, Major: TESOL (2013)

Advanced Certificate in Adolescent Education Grades 7-12, CUNY Hunter College (2013)


Advanced Certificate in School Building and District Leadership, St. Johns University (2017)

Master of Education, Teachers College, Columbia University, Major: Applied Linguistics-Second Language Acquisition

Date Graduated

May, 2020